THE NEW

Home Economics

OMNIBUS

HARRIS & HUSTON

Hm7

PRINCIPAL GRAMSEV'K TRAINING CENTRE
Parh.

The New HOME ECONOMICS OMNIBUS

FLORENCE LaGANKE HARRIS
Home Economics Consultant, Cleveland, Ohio

AND

HAZEL H. HUSTON (PRICE)
Associate Professor of Home Economics Education
Ohio State University

WITH ILLUSTRATIONS

D. C. HEATH AND COMPANY
BOSTON

THE NEW HOME ECONOMICS OMNIBUS

COPYRIGHT, 1935, 1941, AND 1945, BY D. C. HEATH AND COMPANY

ALL RIGHTS RESERVED, INCLUDING THE RIGHT
TO REPRODUCE THIS BOOK OR PORTIONS
THEREOF IN ANY FORM

5 B 4

Offices: BOSTON NEW YORK CHICAGO DALLAS
ATLANTA SAN FRANCISCO LONDON

PRINTED IN THE UNITED STATES OF AMERICA

REPRINTED FROM CURRIER & IVES, LITH. N.Y.

ENTERED ACCORDING TO ACT OF CONGRESS, AD 1867 BY CURRIER & IVES, IN THE CLERK'S OFFICE OF THE DISTRICT COURT OF THE UNITED STATES, FOR THE SOUTHERN DISTRICT OF N.Y.

HOME TO THANKSGIVING.

TO THE TEACHER

The need for a single textbook covering all the phases of home economics as taught in the high school has been demonstrated by the immediate popularity and continued wide use of the first HOME ECONOMICS OMNIBUS. This need exists from the standpoint of both cost and convenience. To ensure that "The Omnibus" shall meet it with the utmost satisfaction it has been thoroughly revised, supplemented, and brought up-to-the-minute in all its parts.

The many excellent books now available usually are written to present only a few phases of the modern, well-rounded, homemaking course. In these days when expense is a major consideration with great numbers of high school pupils, the purchase of more than one text during a two-year course, plus the expense of the essential laboratory materials, often becomes a serious burden. The present work is designed to relieve the situation. At the same time, the authors feel that the inclusion in a single volume of all the basic divisions of the subject, each presented with a wealth of essential data, will prove economical of much time and effort both on the part of the pupil and the teacher.

All eight divisions of the standard home-economics set-up are included here — (1) foods and nutrition, (2) clothing, (3) house-planning and furnishing, (4) consumer education, (5) home management, (6) child care and development, (7) health, and (8) family relations and personal regimen. For these topics the authors have assembled the subject matter after careful examination of various representative state courses of study. Furthermore, the information is the most authentic available, the facts having been checked with the findings recorded in the latest reference books for both high school and colleges, in government bulletins, and in research publications of universities, various foundations, health organizations, and commercial concerns.

The text has been written to center about the girl's life. This has given the book an informal style which the authors hope will challenge the girl's interest and cause her to wish to carry on further research.

In keeping with the informality of style the usual names for the various phases have been somewhat changed. But this change

has not affected the subject matter. Here are the changes: "Foods and Nutrition" — "The Well-Fed Family"; "Clothing" — "The Well-Dressed Girl"; "Houseplanning and Furnishing" — "The Well-Planned and Furnished Home"; "Consumer Education" — "The Well-Spent Dollar"; "Home Management" — "The Well-Managed Home"; "Child Care and Development" — "The Well-Cared-For Child"; "Health" — "The Well-Being of the Individual"; "Family Relations and Personal Regimen" — "The Well-Bred Girl and Her Social Relationships."

The subject matter presented should be used in solving problems and in meeting real life situations which seem important to the teacher and the girl at the moment. For example, if ninth-grade girls assume much of the care of children for pay or at home, the child care unit may well be used in this grade. According to this plan, the subject matter will not be presented in any special order. Rather, units of material will be drawn upon as needed. For instance the first three units of foods may be used in the ninth year, the remainder in the tenth grade; the clothing units may be divided similarly, the first five being used in the first year of the course. Units in various phases may be alternated for the sake of interest; thus the units given in the first year might be (1) the introduction of foods, (2) the laboratory outfit, (3) breakfasts, (4) the A B C D E of dress, (5) clothing needs and budgets, (6) underwear, (7) luncheons, (8) the tell-tale exterior of the house, (9) the revealing interior of the house, (10) your own room, (11) the school dress.

The class activities set up at the end of the units have been chosen as samples of the kinds of activities which teachers have found successful in directing the learning of their students. The teacher may use many of these as suggestions for laboratory work, as guides for supervised study, and as workbook material.

Many books and bulletins are listed at the end of the divisions of the book in the hope that students will wish to delve more deeply into various aspects of the field.

Teachers should set up as teaching objectives many goals which they wish to see attained in the forms of changes in student behavior. They should give the girls accurate information in home economics, but should desire as well to see the girls apply this

information in their daily life in the formation of habits, attitudes, desires, and appreciations. Teachers should not only show a student how a certain process is carried out, but should make an effort to have her develop the ability to carry on this process successfully herself.

In checking the attainment of these desired results, information tests alone are inadequate. Many other types of testing situations need to be used. This textbook gives tests that may be used to determine whether some of the other desired goals have been reached. Many of the class activities, although not objective in form, will reveal the presence of the desired behavior.

It is not the teacher alone who should be conscious of the objectives to be attained. It is highly desirable that the girl share this knowledge and help score herself on her attainment. For this reason, the tests are included in the textbook put in the hands of the girl. If she assists the teacher in determining whether she is displaying suitable behavior and if she feels she is sharing in measuring her progress, she will make a greater effort to attain the desired goals.

The tests included have been used in vocational schools of Ohio. They are presented in their present form after criticisms and revisions suggested by the vocational home-economics teachers. The authors are deeply appreciative of the assistance of these teachers. Miss Enid W. Lunn, State Supervisor of Vocational Home Economics in Ohio, very kindly gave permission for the carrying out of this measurement program in the schools of the state and has been most helpful in her coöperation. Dr. Ralph Tyler of the Bureau of Educational Research of Ohio State University directed the measurement program and the authors wish to acknowledge their indebtedness to him.

The authors in emphasizing objectives of teaching, in choosing the class activities and subject matter to be included in this book have been guided by the philosophy of John Dewey as he expresses it in his pedagogic creed when he says, "Education is a process of living, not a preparation for future living. . . . The only true education comes through the stimulation of the child's powers by the demands of the social situation in which he finds himself."

Florence LaGanke Harris
Hazel H. Huston (Price)

CONTENTS

To the Teacher vii

Introduction 3

I. THE WELL-FED FAMILY 7

General Discussion 7

Let's pretend — To-day's food preparation versus that of yesterday — Measurements.

Unit 1. Relation of Foods to Positive Health 14

Introducing foods — Digestion — Energy content of foods — Dieting — The meals of yesteryear versus those of to-day — To-day's knowledge of food nutrients — Vitamins.

Meal Planning 47

General Discussion.

Unit 2. Breakfasts 51

Fruits — Cereals — Eggs — Quick breads — Beverages.

Unit 3. Suppers, Luncheons, and Box Luncheons 77

Soups — Creamed dishes — Vegetables — Sandwiches — Milk and milk products — Cheese — Salads — Desserts.

Unit 4. Dinners 110

Meat soups — Meats, poultry, and fish — Breads — Pastry — Cakes — Cookies — Desserts using gelatin — Ice cream.

Unit 5. Foods for Special Occasions . . 157

Holiday meals — Candy.

Unit 6. Food Preservation 169

General discussion — Jelly making — Canning of fruits, vegetables, and meats.

Unit 7. Fascinating Foods 177

Foods and scientific research — Foods and literature.

Unit 8. Marketing and Food Storage . . 181
Economics of purchasing (Need for consumer education) — Storage of food in the home — Pests.

II. THE WELL-DRESSED GIRL 195

General Discussion 195

Unit 1. When Is a Girl Well Dressed? . 196
The A B C D E of dress — Grooming and posture — Relating the line of your clothes to you — Relating the color of your clothes to you — Relating accessories to the rest of your clothes — Choosing suitable fabrics — Shopping for clothes

Unit 2. The Laboratory Outfit . . . 231

Unit 3. Clothing Needs and Budgets . . 233

Unit 4. Underwear 237

Unit 5. The School Dress of Cotton, Linen, or Rayon 246

Unit 6. The Tailored Dress 252

Unit 7. The Dressy Afternoon Frock . . 257

Unit 8. Clothes for the Small Child . . 261

Unit 9. Care and Repair of Clothing . . 266

Unit 10. The Remodeling of Clothes . . 272

III. THE WELL-PLANNED AND FURNISHED HOME 278

Unit 1. The Telltale Exterior . . . 278
Landscaping — Architecture.

Unit 2. The Revealing Interior . . . 290
The living room — Your own room.

Unit 3. The House of Your Heart's Desire 302
Planning the house — Furnishing the house — Modern modes in floor covering — Modern modes in hangings — Modern modes in furniture — Modern modes in household linens — Modern modes in mattresses and pillows — Modern modes in china, silver, and glass — Modern modes in lighting — Modern modes in mirrors, pictures, and accessories — Modern modes in materials.

IV. THE WELL-SPENT DOLLAR 339
Unit 1. Discussion of Consumer Problems . 339
Unit 2. The Budgeting of Income and Outgo 343

V. THE WELL-MANAGED HOME 356
Unit 1. The Budgeting of Energy . . 358
Unit 2. The Kitchen as a Workshop . . 365
Unit 3. Laundering 371

VI. THE WELL-CARED-FOR CHILD . . . 376
Unit 1. Management of Children . . . 376
Unit 2. Physical Care of Children . . 382
Unit 3. The Well-Born Child 385
Unit 4. The Growing Child — His Clothing and Activities 390
Unit 5. The Growing Child — His Food . 400
Unit 6. Parties for Children . . . 409

VII. THE WELL-BEING OF THE INDIVIDUAL 416
General Discussion 416
Unit 1. The Development of a Community Attitude toward Health . . . 417
Unit 2. The Contribution of the House to Health 420
Unit 3. The Maintenance of the Individual's Health 425
Unit 4. Safety in the Home 433

VIII. THE WELL-BRED GIRL AND HER SOCIAL RELATIONSHIPS 436
Discussion of Personal Regimen 436
Unit 1. The Characteristics of a Desirable Friend 438
Unit 2. The Perfect Hostess 442
Unit 3. The Perfect Guest 447

Unit 4. Introductions 448
Unit 5. Table Setting and Service . . . 451
Unit 6. Table Manners 461
Unit 7. Manners and the Social Life . . 466
Unit 8. Recreation and Entertaining in the Home 468
Unit 9. Budgeting the Emotions, or Relationships with Other People . . 473
Unit 10. The Girl and the Man 478
Unit 11. The Girl and Her Job 482
Unit 12. Getting Along with the Family . 485

LABORATORY PRACTICE

I. THE WELL-FED FAMILY 497

General discussion — Dishwashing — Terms used in cookery — Exact measurements.

Recipes 504

Beverages — Toasts — Cereals — Eggs — Hot breads — Yeast breads — Soups — Vegetables — Meats — Festive birds — Sea foods — Cheese — Salads — Desserts — Cakes — Cookies — Pastry — Frozen desserts — Candy — Canning — Jams and jellies.

Tables and Charts 591

100 calorie portions — Comparative nutritional chart — Weight-height-age charts for girls and for boys — Energy requirements of average man — Energy requirements of average woman.

II. THE WELL-DRESSED GIRL 605

Chart of Thread and Needle Sizes . . . 605

Clothing Construction 606

Good lines and proportions — Basting and marking stitches — Seams — Setting in of sleeves — Buttonholes — Stitches combined to make embroidery — Handmade stitchery

Clothing Repair 624
Children's clothes — Darning and repair of knitted underwear — Repairing lace — Lengthening clothes.

Coiffures 628

III. THE WELL-PLANNED AND FURNISHED HOUSE 631

Furniture Charts 632

Kitchen Planning 635

Measuring for Hangings 638

Lighting 640
Chart of lamps — Operating costs of appliances — Typical wiring plan.

V. THE WELL-MANAGED HOME . . . 644

Laundering 644
Laundering family clothes — Synthetic fabrics — Wools — Gloves — Dyeing in the washing machine.

VIII. THE WELL-BRED GIRL AND HER SOCIAL RELATIONSHIPS 651

Showers 651

The Wedding 653

Index 657

THE NEW HOME ECONOMICS
OMNIBUS

INTRODUCTION

Isn't being quite grown up exciting? The family pays attention to what you say. You are able to persuade them to get something new. You no longer have to be home by seven. You have become a person of importance. This is quite a change from the time you were eight years old or thereabouts.

But in this process of growing up you have been hurt many times and you have had to accept responsibilities. When you were seven or eleven, you never stopped to think about being popular. You played with the neighbors' children or you didn't, just as it happened that you did, or did not, "have a mad on" with them at the time. If some girl or boy wouldn't play with you, that refusal never bothered you. Nowadays if you can't play around with a certain group or if some boy never seems to see you, you wonder. You don't talk about it out loud, or at least not to many people, for the hurt is too deep. But the puzzle is there—Why don't those girls ask me to walk home with them; why does Frank hurry past on the other side of the street?

When you were young, say seven or eight, you announced with great positiveness that you were going to have a party. You never stopped to think about food or clothes or work or expense. You said, in the most matter-of-fact way, that you wanted a party. Such a thing as getting a congenial group of people together who would not snub one another never entered your head. The people around you were lumped together as folks, not considered as separate individuals with likes and dislikes.

Suppose you want to have some boys and girls at your house for supper Sunday evening. Now that you are well on the way to being a grown-up person your mind plays with the idea and thinks of such things as these: Will Mother be willing; what can we have to eat; what dress shall I wear; will Father say the party costs too much; shall I ask Mary, she is so funny about the boys;

will that big tease of a brother be home to make life miserable; who is going to keep my young sister in order? All these questions are a result of your growing up. "When I was a child I spake as a child, I understood as a child, I thought as a child, but when I became a man, I put away childish things."

Let's look at those questions you asked. First, will Mother be willing? You are recognizing that Mother is a director of the home and should have something to say regarding the plans of any member of that home.

Will that big tease of a brother be there, and how about the other sisters and brothers? Here comes the question of relationships of members of the family.

Will Father say the party costs too much? You recognize that Father works day after day to get the money to keep the house going, that after all there is a limit to the money he can make. You are thinking, although you may not put it that way, about a budget.

Shall I ask Mary; she is so funny about the boys? There enters the question of relationships between boys and girls. That relationship is going to play an exceedingly important part in your life. It's going to give you pain and joy and hurts and wonderments. You are not going to be able to escape it, so you might as well think it out now.

What dress shall I wear? That question is related closely to the Mary and the boy one. There are some people who say that women dress to impress women. Other authorities say women dress to please the men. You might tuck that question away to think about in your spare moments.

Shall I ask Dorothy; she is so critical of everybody's home? That query brings up a discussion of interior decorating which sounds formidable but is nothing more nor less than making a home an attractive place in which to live.

What shall we have to eat? There is a question which bears a close relationship to budget and good looks and etiquette and skill in food preparation — and even to psychology.

See what large problems you take into consideration when you think about so simple a thing as asking a few friends for supper on a Sunday evening. This book gives you answers to those ques-

tions. It may not say in so many words, "This is right — and this is wrong," but it will state both sides of the question and then from those facts you may make your own decisions.

That, in fine, is the price one pays for growing up. When you were six and teased Mother for something, she said "Yes" or "No" and that was that.

Mother and Father still make many of your decisions for you. They can do it wisely because they have the experience of years to back their decisions, but increasingly the burden of the deciding will become yours.

And who wants to do things that are unwise or foolish or undignified?

Years ago when one of the authors of this book took a course in psychology, the teacher said that no one ever did anything in this world that he did not want to do and I challenged it.

"What," said I, "you mean that I wash dishes because I want to do it? You mean I get up at seven because I want to do so? You mean I study late on a grand moonlight evening because I want to do that? Oh no."

We argued for a long time. Almost, he made me see his side. In the examination the question was asked, "How many times do we do the things we want to do?" I wrote — you see I was beginning to be persuaded — "In ninety-nine cases out of one hundred." He drew the blue pencil through "ninety-nine cases out of" and let the sentence read "In one hundred cases."

I agree with him now. That does not mean I am siding with him because both he and I have been, or are, teachers. But because I finally see his meaning. We do everything because it, or something which follows in its train, gives us the result we want. I wash dishes, not because I want to wash them, but because I want a clean kitchen. To have that I must get the dishes out of the way. I get up in the morning, not because I want to do so, but because I don't want to be late to the office or school. Not being late is something I really desire, so I do the things which will make me on time. I study, not because I want to study, but because I want to pass in the examinations, or I want to graduate, or I want to show the boys that girls are good scholars. I do the lesser things because I have a larger end in view. And

so I say, "In one hundred cases we do the things we want to do."

You want to be a pleasing person, a delightful hostess, a jolly companion, a girl who can lead in athletics or games or what not. To accomplish that big purpose you need to know the lesser things you must do.

This book is devoted to ways and means of doing the lesser things so that you, yourself, make yourself the woman who is your ideal. That's a big task. More power to you.

I. THE WELL-FED FAMILY

GENERAL DISCUSSION

Let's Pretend

Into the laboratory we go. We call this discussion "Let's Pretend", for we do just that four times before we finish. To get our work started let's pretend, first, that we really have given an invitation to a group of friends for Sunday supper at home; second, that instead of discussing the menu with mother we are visiting a class that is planning menus for such an occasion.

The teacher has written five menus for Sunday supper on the board. The class has been rating them. The first and last rank equally high. The second one comes next, followed by the third and fourth.

Let's read the menus and see whether we agree with the rating.

MENU I

Platter of cold meats
Fresh vegetable salad Bread Butter
Fresh fruit in season Cookies
Beverage

MENU II

Cheese rarebit in toasted bread cases
Cucumber and tomato salad Bread and butter sandwiches
Banbury tarts Beverage

MENU III

Cold meat loaf, sliced Potato salad
Baked beans Pickles Buns Apple butter
Chocolate cake Fruit gelatin
Beverage

MENU IV

Chicken salad | Bread | Pickles
Angel food | Home-made ice cream
Beverage

MENU V

Cream of potato soup | Popcorn garnish
Lettuce sandwiches | Egg salad sandwiches
Ice-box cookies | Pink apple sauce
Beverage

What do you think of them? Does your choice agree with that made by the class? Remember the first and the last are ranked equally high.

Which one of the two prize winners is a winter menu? Which one would you serve on a summer Sunday evening? Is there any food in the winter one which you might have trouble in getting if you lived in the country?

In judging these menus the girls set up certain standards which would apply when daughter was entertaining. These standards do not take into consideration food values. That comes later in the discussion. With the mother-daughter relationship and company meals in mind, would you add any standards to these which are listed?

1. Food should not be so complicated and fussy that daughter cannot prepare it herself. It is scarcely fair to ask Mother to work all day — especially Sunday — for her daughter's friends. One menu in the above group is especially fussy. Name that one.

2. The menu should not be so heavy, with so much food that guests feel uncomfortably "stuffed." This applies especially to a meal served after a traditional Sunday dinner.

Remember that both boys and girls are invited to this supper. Would that make any difference in the amount of food offered? Even considering the boys' appetites, would you say one of these menus was too heavy?

3. Food should not be too expensive. Which menu has that fault? Would it make any difference if the hostess lived on a farm or in an urban home?

4. The menu should not call for equipment and utensils which are not found in the ordinary kitchen. Is there such a menu here?

Here we are ready for more "let 's pretend."

Let's pretend the class chose Menu V — and then let's pretend you are serving it at home on a Sunday evening soon. That means we must do some planning and get to work.

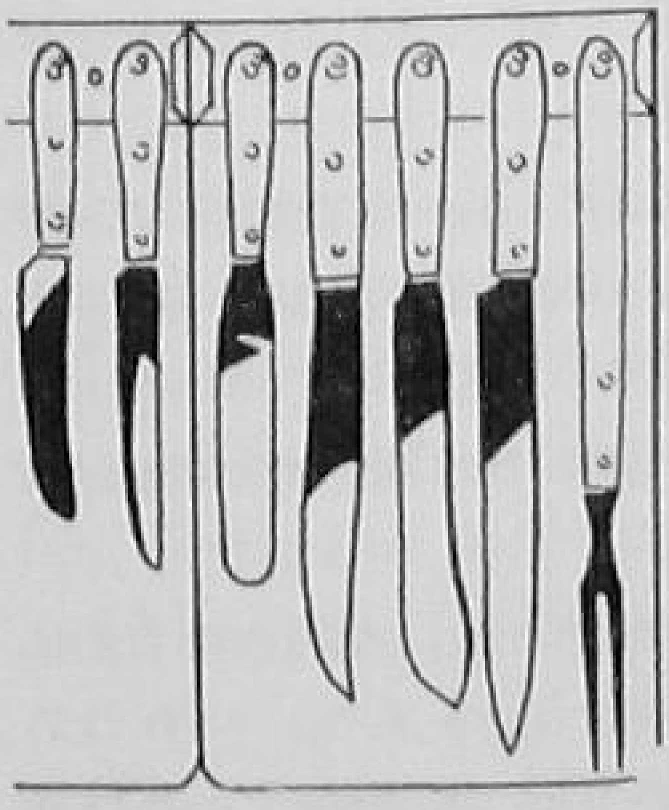
Before we can start cooking we must have food supplies in the house. Let's make out an order list, checking the supplies on hand and the ingredients called for in the recipes.

It is a wise plan to take paper and pencil and make three headings. The first is "What I have on hand"; the second, "Staple groceries I must buy"; the third group, "Perishable foods I must buy." The third group may be subdivided into foods from bakery, meat shop, greengrocer, or fruit and vegetable market.

Make out your list. Check with other members of the class. Did you remember to put down salt, pepper, and brown sugar as well as the more unusual groceries?

Next check the recipe directions to see what utensils and equipment you need to prepare these dishes.

You might turn to the discussion of utensils to see whether the school and your home have the best type. A good carpenter is known by his tools and the state in which he keeps them. Too frequently a home-maker's tools are makeshifts. Very often good utensils are kept in poor condition. If you help wash dishes at home, and if any of the utensils are not in good condition, is any of the poor condition of those tools due to your carelessness, for instance?



Thus far we have planned our order list and checked utensils. There is still another piece of planning. Which food shall we prepare first; which one last?

Planning is not cooking but it is management. Mother gets her day's work done because she has learned to plan. In her day, planning or management was not taught in school. This is where you have an advantage.

Once more we go back to the recipes to study them. In the ice-box cookie recipe we read that the dough should be chilled "over night." That gives us a clue as to a food which may be prepared ahead of time. Are you serving the pink apple sauce hot or cold? If cold, it might be prepared ahead of time and, if it is wanted hot, it could be reheated.

Notice the cautions listed in sandwich and in cream of potato soup making. What are they? And where do the cautions place the time of preparation?

The hard-cooked eggs used in the sandwiches are difficult to handle when hot. There is another clue.

This getting ready for a meal is something like a picture puzzle. All the parts have to fit in to make a complete and pretty picture. Suppose your teacher has said that you need to practice preparing these foods so you will be perfect. Was perfection all she was aiming to have you acquire?

To answer that question you need to think back to some time when everything went wrong on the afternoon that company was expected. Remember such a day? Perhaps Mother had heard of a new salmon loaf and she decided to make it for company. Because she had never made it before she worried from the time she started mixing it until it came to the table. Was the mixture stiff enough? Did it have sufficient flavor? Would it unmold and slice without breaking?

No hostess should try a new dish on the day she expects company. Experimentation on the family on an ordinary day is not so nerve wracking.

A worried hostess has little poise; she is apt to be apologetic (always a bad mistake).

Experience gives assurance and ease of manner and perfect food. For goodness' sake let's experiment and practice!

Mother has cooked so many meals that she has learned certain recipes by heart. That saves her hunting through a cook book. But you are younger in this cooking job. If you are wise, you will follow recipe amounts and directions implicitly. You won't guess at them. Once upon a time there was a food show with a gingerbread contest. One woman's gingerbread was almost good enough to win a prize. It felt light, it looked brown on top. It was ten-

der and rich. But she did n't win a prize. She came to the judge afterward and said, "Why did n't my entry win a prize?"

The judge broke off a piece of gingerbread and smelled it. Then she said, "How much soda did you use?"

And the woman said, "You know, I was afraid when I put in that last pinch of soda I put in too much. I did, did n't I?"

One does n't win prizes in food shows by guessing at amounts.

In time you may substitute a trained eye and experience for exact measurements, but it's a practice never to be recommended. Now, while you are a beginner, you needs *must* follow directions to the letter — that is, if you want to have food you are proud of.

It is no crime to forget a recipe and have to look it up. It is wasteful and stupid to guess and waste ingredients, or to be in ignorance of sources for authoritative recipes and directions.

To-day's Food Preparation versus That of Yesterday

Why do we need new textbooks in food preparation? Why bother to learn how to cook in school anyway? Why not watch Mother or the cook at home and follow her methods?

Food preparation has been important ever since man felt pangs of hunger and acquired a dislike for raw foods. Most cookery processes have been evolved via the route of trial and error. Results have been handed down from generation to generation.

But this scientific age in which we are living has not been satisfied with the mere acceptance of past performances.

It has said, "Why do we do things this way? Is n't there a better way or a way which gives more certain results?"

That urge to know the "reason why" has driven food specialists to experiment in test kitchens, in experimental cookery classes in colleges, in commercial food laboratories.

The results of the experiments are included in this book.

The girl of to-day who cooks intelligently is accepting such findings as: the necessity for exact measurements of materials, of manipulations, and of temperatures; differentiation between

chemical actions of various baking powders; roasting of meats in open pans with omission of basting; tests for "doneness" in meats by taking temperatures of interior of roasts; use of commercial pectin in jelly making; increased use of commercially canned foods; using a shorter time for cooking vegetables; service of more of them uncooked. She is keeping an open mind regarding ready-mixed products, gelatin and junket powders, prepared flours; quick-frozen or fresh-frosted foods; collecting, appraising, and using printed recipes appearing in papers and magazines; keeping abreast of new food findings as reported in papers and lectures; watching commercial food advertising with intelligence; basing meal planning on food values; studying the application of the laws of chemistry and physics to food preparation; realizing that cookery may be a fine art and not a job of drudgery.

Measurements

Lady Luck is not the presiding genius in a kitchen any more than she is in a chemistry laboratory. Cooking is based on laws of chemistry and physics. If we hope to get the perfect results time after time, we must obey these laws, measure with exactitude, cook at precision temperatures.

It is quite true that experience is a good teacher, but it is equally true she is an expensive one. Why ruin a cake by guessing at the amounts of ingredients or at an optimum baking temperature? Why put in what looks like enough water in a gelatin mixture when the directions on the box state exactly the amount which will hydrate the gelatin and the amount of liquid which the gelatin will stiffen?

Let's see how many different types of measurements we use in cooking.

First, we measure ingredients. Study the appendix to learn the methods.

The time will come when we measure all our ingredients for cooking by weight. When that day arrives, there will be less chance to blame failures on Lady Luck.

Second, we measure temperatures.

We now have correct tested and approved temperature figures for baking, for boiling syrups, for roasting meats, for deep-fat

frying; temperature and time charts for canning, especially for the oven and pressure-cooker methods.

Third, we measure the amount of stirring or beating. No longer do we do that by clock minutes, but by strokes used in blending ingredients.

Ingredients, temperatures, manipulations—all measured. Here are definite proofs that cooking is coming out of the kitchen ruled by Lady Luck and walking into the laboratory ruled by science.

CLASS ACTIVITIES

1. The class may be divided into groups of four girls each to form a family. Since this is your first meal this year, all four girls may share in the preparation. After each group has (1) made out a market order, (2) listed the individual duties of each girl, (3) worked out time schedules for preparation and serving, (4) studied all the recipes to be used, (5) witnessed a demonstration by your teacher of the dishes with which you are not familiar, and (6) listed the dishes to be used, you may spend one day in the laboratory in preparation for the meal; two girls in each group preparing the ice-box cookies (to be baked the next day) and two girls preparing the apple sauce and the hard-cooked eggs. You might omit the lettuce sandwiches and plan to use ready prepared salad dressing. On the day you are to serve the meal, two girls may prepare the soup and sandwiches, two set the table, prepare the beverage and bake the cookies.

2. Compare your results with those of the other groups.

3. Discuss the following points:

   a. Did we spend more time than we planned for in meal preparation?

   b. Could we have saved time by managing our work better?

   c. What foods do we need more experience in preparing?

   d. What do we need to learn about table service and etiquette?

   e. Could we have improved the food served?

4. Check yourself as you work to find out what your working habits are:

   a. Was my apron fresh and clean?

   b. Did I wash my hands before handling food?

c. Were my nails clean?

d. Did I use a utility tray for soiled spoons, for equipment on my desk, and for carrying supplies?

e. Did I keep my table neat while I worked?

f. Did I use as few utensils as possible?

g. Did I use a tasting spoon?

h. Did I wash dishes properly?

(1) Use soapy hot water for washing?

(2) Use scalding water for rinsing?

(3) Drain the dishes before wiping?

i. Did I measure carefully?

j. Was everything put back in place after it was clean?

k. Did my dish towels get washed, rinsed, stretched, and hung straight?

UNIT 1. THE RELATION OF FOODS TO POSITIVE HEALTH

Introducing Foods

It is rather awkward to be working with some one whose name and family you do not know. The same thing applies to foods. Since we are working with them, this seems an opportune time to introduce them.

Have you ever been introduced something like this — your best friend Frances comes rushing up to you with a good-looking boy in tow and says, "Mary, this is John." You say, "Oh, hello, John." And then you look at him and he looks at you and neither one of you knows what to say to the other. Frances was at fault, for she gave you no conversational knob or handle to open the door of friendship. If only she had said, "Mary, this is John. He plays on the football team in Lorain, you know" or "John has a great line, but really he is a whiz at math. Honestly, he's too smart to live." With such a line of chattering introduction you are given some clue as to how to talk to John. You may feel too dumb for words when Frances tells you he is too smart to live, but most girls can be relied upon to show John he is n't so smart after all — if only they know something about John. Then too, sup-

pose you went home and told Mother you met a new boy. "Is that so," says Mother, "what's his name?" "John," say you. "John what?" says Mother. And you can't tell her whether he is John Smith, John Blennerhassett, or what.

Frances failed a second time in her introduction in that she did not give you a tag or family label for the new boy.

Family names and family traits or peculiarities are a help in the give and take of social life.

They are of help in the business world and — this is what we have been leading up to — in the food world.

There are six important families in the food world. In it there are intermarriages and relationships and cousins unto the twenty-fourth degree. It is almost as closely intertwined as family relationships in a small sleepy Southern town. But important names need to be known, even there.

Foods are substances which furnish energy to the body, build and repair tissues, or regulate body processes.

In the foods we find the following important groups or families:

Carbohydrates Fats Proteins Mineral Salts Water Vitamins

Carbohydrates. The two important branches in the carbohydrate family are the starches and the sugars.

Fats. Fats are of varying forms and shapes — but always characteristically fats or fatty.

Both these food nutrients or food families — the carbohydrates and the fats — have carbon, hydrogen, and oxygen in their family tree.

Proteins. Proteins divide themselves into two main groups — the complete and the incomplete. That is a rough classification, for there are at least twenty-one known separate branches of this family. One thing they have in common — nitrogen, which is in the composition of each and every one. The possibilities for inter-relations in this group have been estimated in the quadrillions.

Mineral Salts. The group of mineral salts is large also, but we are interested primarily in calcium, phosphorus, iron, and iodine.

Water. Water is a nice old standby — hydrogen and oxygen. It lacks the carbon found in the carbohydrates and fats.

Vitamins. But the vitamins — well, they are the newcomers in this great family. Up to a short time ago they were never even introduced. They had been in existence just as long as the other families, but they had n't made the grade. Now they are the aristocrats in the food world.

Cellulose. Sometimes in the blue book of society a person's name is dropped because he has n't maintained the accepted standards. Sometimes he is dropped without being to blame.

A case in point is found in the food world. Cellulose used to be listed as a food. To-day we say cellulose, the woody indigestible fiber, cannot be called a food because it is not assimilated in the body. But it is an exceedingly useful member of the food society. Without it we become of necessity too familiar with laxatives and cathartics.

Acid versus Alkali. Just as we have two major political parties in our country so we have two major parties in the food world. Some of the foods contain acid-forming elements and some contain base-forming elements. We shall come back to that. Just remember, there is conflict in the food world. It takes a wise person, a veritable Solomon, to maintain a strict neutrality. Unless that is done, the body suffers. You are your body, so you will have to be your own Solomon and eat wisely to keep a balance.

We have fulfilled the first part of an introduction — that is, given the last or family name in the food world. But we have n't given you a handle or knob to open the door of food knowledge. That comes next.

Carbohydrates are the starches and sugars found in food. They are good energy givers. Fats are the fuel givers. Proteins build and rebuild tissue. Mineral salts furnish building material and act as body regulators. Cellulose acts in a regulating capacity.

Water is needed to replace the large amount which the body loses daily. It acts as a regulator and a solvent. Vitamins are body regulators of a kind so important that without them there could be no health maintained and no normal growth or development.

Now let's go back to the definition of food.

Foods are substances which furnish energy — fats and carbohydrates; build and repair tissue — proteins; regulate body proc-

esses — the vitamins, mineral salts, and water. But as we said earlier, these food families are so intermingled and mixed that it is hard to draw a hard-and-fast line to separate them. A protein may furnish energy on occasion — a carbohydrate may find itself stored as a fat. A vitamin may not be of much use unless a mineral salt is there to help it or one mineral salt may be helpless without its first cousin, another mineral, and so it goes.

Digestion

Many writers and lecturers have likened the human body to a machine. They say that a machine's parts wear out and need repair or replacement. They point out the fact that a machine cannot go unless it has fuel. They say fuel furnishes heat when it is burned and that heat releases energy which makes the wheels go round. All of which is true of the body. But a machine differs from the body in that the stopping of the machine's wheels means the ending of its activity and the need for fuel, whereas the human body never stops activity as long as a breath is taken.

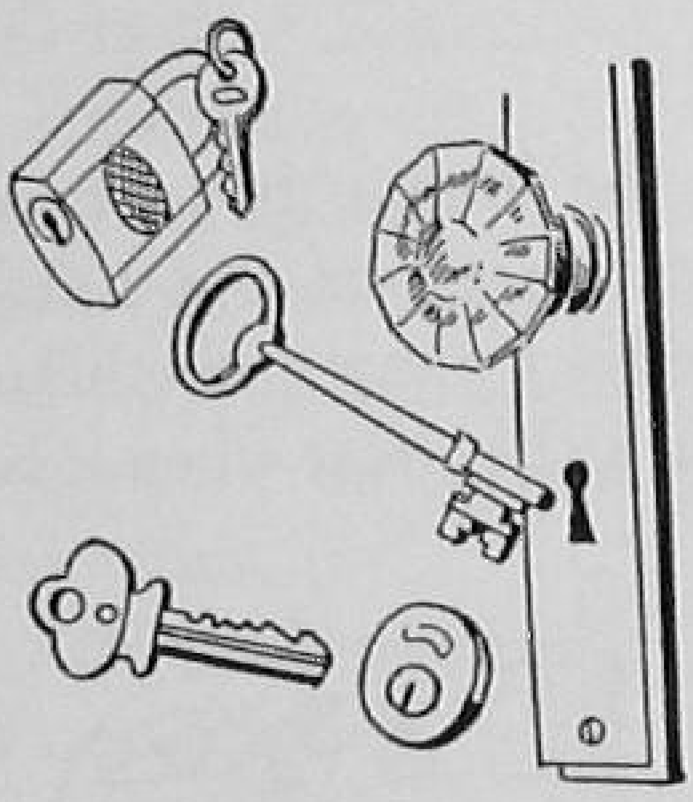
The human body differs in another way from a machine. Fuels cannot increase a machine's stature an inch or two, or repair wear and tear. But food does all these for the human body. We eat to live, eat to grow, and to keep ourselves in good repair.

Many of us have difficulty keeping in repair because we live to eat, not eat to live. Too much food is almost worse than too little. Why? Well, let's study digestion for a few minutes. Our outline of it is going to be just long enough to furnish a review of work you have had in other classes, or to whet your interest to read at length and get the whole story as we know it to-day.

Foods are complex substances. As they exist, and in the form in which we eat them, they are of little use to the body. A man might cut a slit in his arm and put in a piece of steak or a piece of suet. Until infection or decomposition set in, the steak would stay steak and the suet would remain a lump. As a food or a fuel it's a failure. Even chopping the steak or suet before inserting

it would not help matters, although when we eat food, the first process is a mechanical one of splitting it up into fine bits. But as it is broken into bits by chewing it is mixed with saliva. That liquid not only helps to soften it, but does more. Saliva is normally alkaline and contains an enzyme, "ptyalin" by name.

Enzymes. Enzymes act something like door keys. They unlock complex foods, acting as a catalyst. No one has ever heard of a door key losing its identity and becoming a part of the door lock. Seldom does a key wear out from use. No one has heard of an enzyme becoming an actual part of a food substance upon which it is acting, but unlike a key, it may be broken down itself into simpler substances, amino acids in fact. Enzymes are now known to be of protein composition. They are valuable and absolutely necessary.



There are three families of enzymes in the body secretions. One kind works with starches and sugars, another with fats, and a third with proteins. Each different lock requires a special key. Keys are not interchangeable — neither are enzymes. Each one has its own foods to split up.

Ptyalin acts on starch. If a piece of buttered toast with melted butter permeating through and through the starchy toast meets the saliva, the "starch" enzyme has little to do. It can't work with fat, and the starch is inaccessible. So the food slips down to the stomach. Here it lies in a warm dark pouch effect for a little while. The warmth may cause a little of that melted butter to free itself from the toast or starch. Then the enzyme mixed in with the saliva has a little chance, but not much, for soon the food gets into the main part of the stomach, where it meets hydrochloric acid and an enzyme that is interested in proteins. Ptyalin works only in an alkaline medium, so it ceases operations. The stomach is lined with muscles laid in opposite directions. There is pulling and squeezing of these opposing muscles. This is called peristalsis. The food finds itself getting finer and finer and more thoroughly mixed with acid. Finally the substance, which was buttered toast and now is

"chyme", is so acid that when it is squeezed against a ring of muscles surrounding the opening of the stomach into the small intestines, these muscles relax and let the chyme through. Now it is in the intestines and kept there because the muscles on the other side of this ring won't let the ring open until the chyme has become alkaline. The liquids in the intestine are alkaline, but until the chyme is changed from an acid to an alkaline state, it cannot go back into the stomach. By that time the chyme has had many adventures and is quite a way along the intestinal road. That leaves room for a new lot of acid chyme to spurt through.

When this first chyme found itself in the small intestines, it was greeted by three kinds of enzymes: one that liked starches, another that liked proteins, and a third which enjoyed fats.

The enzymes set to work splitting up and unlocking the complex substances until finally the starch finds itself changed into a single sugar, the protein into a set of amino acids, and the fat into fatty acid and glycerol. The bile, a sorry-looking greenish-yellow liquid sent from the liver, has been assisting, as well as the enzymes, in splitting up the fats.

No sooner are the foods reduced to their simplest form than they are absorbed. For the lining of the intestines is like fine velveteen. Imagine all the tiny piles in the velvety fabric. In the intestinal lining they are called villi. They differ from textile piles in that they have avid openings which take up all the end products or simple food substances. Also, fine white threadlike absorbent vessels, called lacteals, absorb end products of milk. They absorb fat and sometimes protein excess. Once absorbed, the end products are carried to the blood stream and the lymph.

In the blood is oxygen. It meets these end products and oxidizes or burns them. That gives us the energy we need.

Some of the end products — the amino acids — go into the construction and repair of tissue.

Some of the material in being oxidized has a mineral ash left. Some of that is used in tissue building, in building of bones, hair, teeth, and nails. Some of it is just a nuisance. So are some of the remains from the proteins.

Water which we have taken is absorbed as water, with no oxidation or heat or energy resulting.

The woody fiber or cellulose in the potato, the cabbage, the spinach is somewhat softened in all this passage but otherwise unaffected. It acts as a broom to sweep waste material from tissue breakdown out of the body in the form of feces.

Digestion then is a twofold process — that of mechanically breaking food into small pieces and that of changing foods from complex substances into simple ones that may be absorbed. Once absorbed, they are built up and over into the complex creature that you are. This building over into you is called assimilation.

In this process of digestion, absorption, and assimilation there are bound to be some left-over products.

Suppose we use an idea originally propounded in a book that should be on every homemaker's shelf, "Feeding the Family."[1] Taking the idea and elaborating it we get this:

Suppose you took page 81 in any book, say this one, and separated all the words into the letters which make them up. That process would be similar to the splitting up done by enzymes. And after splitting up we could say that digestion had been going on.

Now suppose we take these same letters and attempt to set them into the reading matter that is on page 8. Recognize absorption?

Both pages use letters, don't they? But do they use exactly the same ones in the same combinations? Recognize assimilation?

We shall find plenty of uses for letters that make words like "the", "and", "so", "for", and so on. These words might have been transposed with no change. They resemble water in that no change takes place in its digestion and use.

We find that the letters "a", "n", "g", "l", and "e" appeared as "angle" on the first page, but on the second page we use the word "angel", same letters but different word entirely. Egg white may reappear in you as repaired muscle tissue. There is quite a change in appearance but the same elements are in both.

There may be such a word as "bread" appearing many times on page 81 and only once on page 8. If we try to put it on page 8 many times, it is equivalent to eating more bread than we need. Then we get excess which causes trouble.

Some letters may be left over entirely. They may well be the cellulose or woody fiber. Certain needed letters may be lacking

[1] "Feeding the Family," Mary Swartz Rose. The Macmillan Co.

when we come to set up page 8 and that means we need to add certain things to our diet to complete the story.

The Energy Content of Foods

Does it seem as if we never would get back to meal planning?

"Any one," you say, "can plan meals."

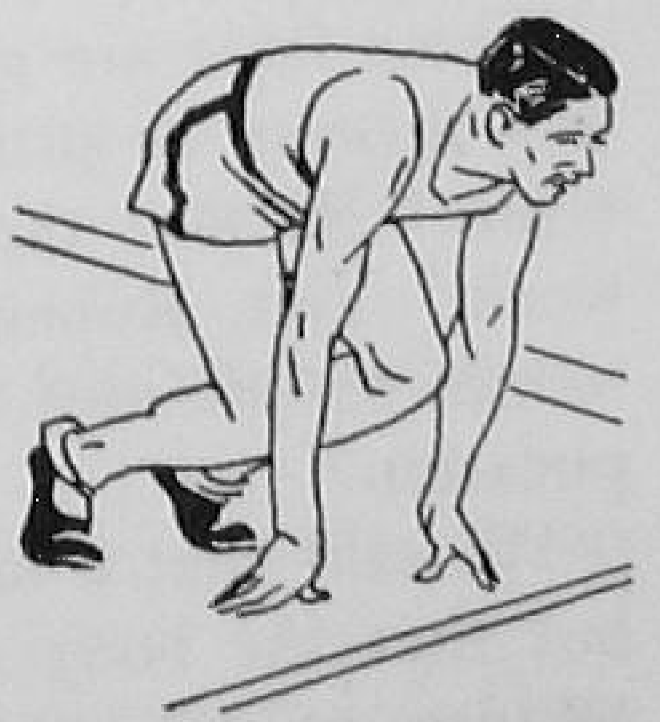
"Yes," say we, "but can she do it intelligently? If so, why are there so many painfully thin people, so many more than pleasingly plump persons, so much indigestion, so many monotonous meals?"

The intelligent planning of meals is comparable to a group of girls meeting an old friend after an absence. The group all try to tell her in one breath and at one time what has happened while she was gone. Each story is important and should be told. Each story bears a relationship to the girl. So in meal planning there are many facts that must be told to make the subject intelligible.

Once we are familiar with the facts, meal planning is good fun and results in good health (within bounds, for there is more to health than food, of course).

Thus far we have learned the principal foodstuffs, nutrients, or families. We have learned what happens to them in digestion and assimilation. Now we are ready for a discussion of fuel requirements.

We likened the body to a machine, in that both required fuel to make them go.



Foods are the body fuels. After they have been split into their simplest forms and have been absorbed into the bloodstream, they are oxidized by the oxygen in the blood. Oxidizing releases energy and in releasing energy gives off heat as a by-product.

To prove we get energy from food we need only to come in from school tired, languishing, famished, then to eat some lunch and to find ourselves, within a short time, going out to beat all the rest of the crowd in a four hundred yard dash. It is unfortunate that the energy is not released so quickly when a dash is to be made to the grocery store on Mother's errand.

Sugar gives energy within a few moments after it is eaten. This is because its change to a single sugar, its absorption, and its assimilation are exceedingly rapid. It takes more time to get energy from a lettuce salad or a cheese sandwich. Candy is a good "pick me up." So good, indeed, that there are dangers in its over use. But that's left for you to puzzle out for yourself.

Energy is measured by a unit called a calorie. This word, which has become so popular that every one recognizes it by sound if not by sense, is to energy what a yard is to cloth or a pint to a liquid — just a measure. The calorie referred to in this book is the one defined as follows:

A calorie is the amount of heat required to raise the temperature of one kilogram of water one degree Centigrade, or one pound of water four degrees Fahrenheit.

By burning a pound of sugar with a measured amount of water over it and noting the rise in temperature, it is easy to figure the number of calories in the sugar. The same can be done with any foodstuff.

By using a special instrument called a bomb calorimeter it is possible to measure the caloric value of a food when oxidized in the body. That work has been done and figures are available.

One gram of pure protein yields four calories.

One gram of pure carbohydrate yields four calories.

One gram of pure fat yields nine calories.

These facts are given to you as casually as if obtaining them was as easy as picking up a dead leaf on the lawn in the autumn. Rather, these figures represent stupendous amounts of work. Voit, Rubner, Tigerstedt, Abderhalden, and Atwater are names of five men whose work will always lead in calorie computation.

We said that a machine needed no fuel when it stopped work but that the body needed it continuously. It does. Breathing requires energy, so does sleeping, or wriggling the fingers.

Tables have been computed giving the figures for the number of calories required for any body activity.

Thus far we have accumulated two sets of figures — energy requirements in terms of calories (see page 604), and the calories yielded by one gram of protein, carbohydrate, and fat.

We seldom eat starch or fat by itself. We bake a potato and spread it with butter. Now we have a good combination of starch and fat. How many calories does that give us? To find out, we need to know the composition of both the butter and the potato. We need to know, for instance, how much water there is in potato, for water has no caloric value. Obviously, then, in computing calories we cannot take the actual weight of the potato and say it is all starch and proceed on that hypothesis. We must have the percentage composition of foods.

These figures are available. (The source to which we turn is a government bulletin.)[1] So is a table, which makes computation much easier. One hundred calorie portions of foods have been worked out. By consulting these figures it is easy to compute the calories in a meal. If a piece of pie two-thirds inch in diameter yields one hundred calories and a serving of pie measures four and one-half inches — well, figure the calories for yourself.

But a fourth fact is needed — the required number of calories one should get from protein in the course of the day. Or, putting it differently, how much new tissue is a body going to grow, how much repairing of tissue must be done? Upon that should depend the intake of protein. Many discussions have been carried on about this question. But at present we seem safe in saying that growing boys and girls should get from 15 to 18 per cent of their daily calories from protein, and a grown-up from 10 to 12 per cent.

Why have we mentioned protein requirements and not carbohydrate or fat? Because end products of protein cause more havoc than any others if found in excess.

Is there anything else we need to know in the field of calories and meal planning?

Yes. Does one's age, sex, shape, activity have anything to do with calorie intake?

Grandmother sits quietly by the fire, dozing and reading. Does she do as much work as Mother? Since she does not, she needs fewer calories.

Mother works all day. Little brother plays, runs about, grows almost visibly in height during the day. In proportion to body

[1] United States Department of Agriculture, Bulletin 549

weight, which one needs more calories? Little brother — because he is not only using energy in running around but in building new tissue.

Girls and women usually require 20 per cent less calories than boys and men, for the same age, weight, and height.

Jane is a roly-poly, Martha is a tall, willowy girl. Each weighs as much as the other. Martha needs more calories because she has more skin surface through which heat is dissipated.

Ann plays tennis and basket ball, Elizabeth reclines on a day bed. Ann needs more calories not only because she is more active but because her muscle tissue is trained to be active, not indolent.

To plan meals intelligently, then, it is necessary to have this knowledge regarding calories:

1. Calories yielded by one gram of protein, carbohydrate, fat.
2. Calorie requirement of the individual. This requirement is affected by sex, age, shape, activity.
3. Per cent of total calories to be obtained from protein.

Aids to these calculations are tables found in the appendix of this book (pages 593–604).

Dieting

Have n't you heard your fat friend protest that she does n't "eat a thing, not a thing", and yet she gets fatter by the minute? You don't believe her, do you?

If she did not eat a thing, she could not live for any length of time. Living requires energy. Energy comes only from food eaten and assimilated and then oxidized. True, she may not have eaten anything the past few hours, but her body had stored against such an emergency. She is living for the time being on stored foods.

Since energy comes only from food, we have established the fact that she eats something.

Now fat does not descend from the blue like a plague of locusts. It comes when excess food is taken.

Honesty compels us to say here that there are cases of systemic disturbance and incorrect glandular functioning which may bring about excess fat, but those cases are few in number compared with those which come from eating more food than the body needs to carry on its activities.

The thin person who eats and eats — "eats enough to keep a horse alive" — and still stays thin as a shadow is another person whose statements are not borne out by facts.

There may be systemic or glandular disturbance here, too. The thin person may have a poor absorptive system. It may be too sluggish to get the nourishment from the food before it is evacuated.

The girl may have formed the habit of eating so little that she has lost the power to hold a really substantial meal. It is easy to trick the body that way. A person who says she can't eat because she has no appetite is pampering herself. Logan Clendening says, "Appetite is not a necessity. It is a luxury."

Bear this in mind — food gives energy. It takes energy to breathe, to sleep, to walk around, just to exist. If a person is abnormally thin, she is not eating enough to keep the body in good form. She may become irritable, listless, susceptible to disease germs. She is headed for tuberculosis, anemia, lessened length of life due to susceptibility to diseases of all sorts. And she is usually nervous. She has lost her appetite and her good disposition.

Bear this in mind, too — the person who is overweight has eaten more food than her body required. She is storing it as fat and she is storing up for herself embarrassment and inefficiency, with a tendency toward diabetes and diseases of the circulatory system. This means she, too, is lessening her chances for life.

Thick or thin seems dangerous, does n't it?

The sensible course is to study the weight chart, get up or down to within five pounds of the prescribed weight, and then maintain that weight.

It is quite true that we do not put as much emphasis to-day upon weight tables as we did fifteen years ago. We are interested in

the story that bone structure shows. Dr. Wingate Todd [1] was responsible for much of this newer appraisement.

But weight is still important.

Most girls like to think of themselves as slim and willowy creatures. To attain that state they make themselves into thin, bony structures that have neither beauty nor grace. Bones with skin stretched over them are never objects of beauty. Has it occurred to you that you may be built on the plan of a scow and not of a slender canoe? No praying, no fasting will change your bony structure. But scows can be trim affairs at that, and they get somewhere in this world. Perhaps you can give your daughter a canoe-like shape. Consider well when you decide on her father. Two scows won't give one canoe.

The Meals of Yesteryear versus Those of To-day

Your great-grandmother used to feel complimented when her guests said, "Eliza Ann, you certainly set a good table." They said that after they had eaten a dinner of boiled bacon and turnip greens, homemade bread and freshly churned butter, hot, spicy gingerbread, apple sauce, or "sass" and tea.

Your grandmother smiled with pride when her guests said, "Elizabeth, this is certainly a well-balanced meal, not too many calories either." Elizabeth had served strips of crisp bacon with freshly cooked spinach well seasoned, graham bread with dairy butter, gingercake muffins, apple sauce, and coffee.

You and your mother like to hear the visiting teacher say, after she has lunched with you, "Elise, you and your mother know how to plan a meal. And you don't forget the vitamins and mineral salts, either." You served crisp bacon, canned spinach seasoned to taste, gingerbread pudding with apple sauce baked with the gingerbread, and cool creamy milk.

Let's look at those menus. Practically the same, are n't they? Yet great-grandmother is praised for her good table, grandmother

[1] See reports of Brush Foundation, Cleveland, Ohio; also *Journal of Home Economics*, Vol. 26: No. 10, Dec. 1934

for her balanced meal with just enough calories, Mother and you for the vitamins and mineral salts included in your meal.

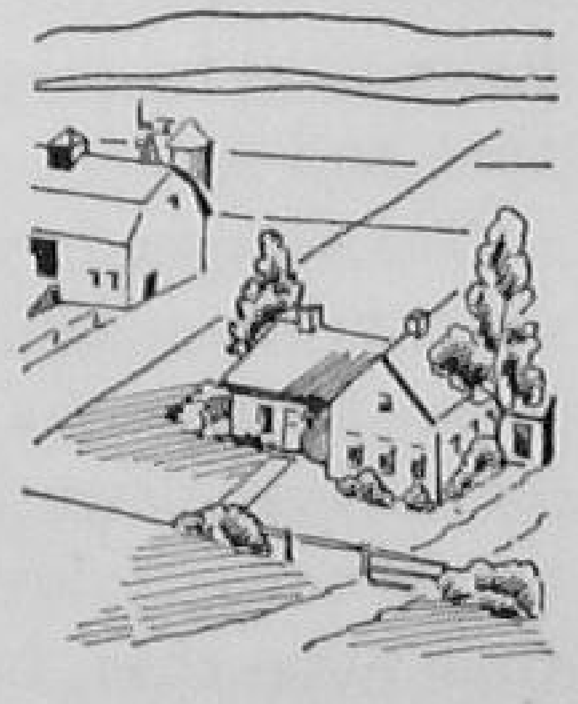
And yet if you could talk to great-grandmother, she would tell you that her daughter, your grandmother, was silly about foods, thinking in terms of balanced meals and calories. "Folks want food, not words and phrases," she would say. And grandmother would think you were just as foolish with your vitamins and mineral salts. "In my day, child, we never heard of such things and we kept well and healthy, too."

What answer can you give grandmother?

Some years ago a dietitian in a hospital waxed indignant over the fried potatoes that the men in the accident ward demanded. According to her notion fried potatoes, or in fact fried foods of any kind, did not belong in a hospital dietary. She said something of the sort to one of the nurses who had a beautiful "school girl complexion", the "kind of skin you love to touch", and the nurse said, "But look at me, I've eaten fried potatoes all my life and I'm all right."

The dietitian was nonplussed and had to think fast for an answer. The only one she could evolve was, "That may be so, but think how much better you *might* have been if you never had eaten fried potatoes."

Your teacher in logic will tell you that her answer was begging the question. But because something of the same sort may be said to you when you go home all enthusiastic about vitamins, calories, mineral salts, you had better be prepared to tell the story of Dr. Funk and his experiments on animals. Get teacher to tell it to you. Also hunt up for yourself that fascinating book by Paul de Kruif called "Hunger Fighters." [1]



You might say, too, that grandmother was feeding her family vitamins all the time, only no one knew anything about them. For they are nothing new, they have been in foods since the beginning of time. You might add that grandmother's family lived closer to the soil than you do. Wheat in those days was grown on

[1] "Hunger Fighters," Paul de Kruif. Harcourt, Brace & Co.

the farm, taken to the mill, and brought back ground into coarse flour. Sugar was brown and coarse. Her foods were not as lily white — as refined — as those we have now. Because popular demand says foods must be fine as silk, it is necessary that we include the substances that were in grandmother's food, which we have taken out in refining. To keep well, we must get them in some form.

Almost all discoveries of food composition are fairly recent. And experimentation is still going on. That means that a fact we learn to-day about food may be displaced by a newer one learned to-morrow. We can't afford to close our minds to new discoveries. We can't let our minds get "set" or "jelled." We must say, "So far as we know now, we believe this to be true. Of course, experimentation to-morrow may disprove this fact, or find one of greater importance. But I, for one, am going to keep my mind as ready to accept new facts in foods as I am to accept new styles in clothes."

You want to remember, too, that the true scientist is always conservative in his statements. He qualifies his remarks. The findings of the scientist do not make front-page news in the papers. But the loud and noisy assertions of the quack furnish good headline material. A quack usually comes to his conclusions on the basis of what has happened to him, and to him alone. The scientist tries his experiments on animals and often on human beings, too. Even then he says, "In the light of present knowledge we believe thus and so."

Did you scoff when teacher told you the story of Dr. Funk and did you say, "Huh, what relation is there between experiments on rats or pigeons and what happens to me — a human being?" Those experimental creatures belonged, as you do, to the animal, not the vegetable or the mineral, kingdom. And it's only fair to assume that, by and large, all animals react in the same way, is n't it?

We can find out what happens to rats because generations of rat families come along quickly. The results in the human family take so much longer to show up. But show up they do. You are, in part, the result of what your grandparents ate. Your grandchildren will show the effects of the diet you choose.

If that nurse with the nice complexion should say to you, "I have eaten fried potatoes all my life, and I'm all right," could you answer her by saying, "You may be, because your grandparents gave you a good heritage of health, but how about your grandchildren to come? Are you giving them as good a chance to be healthy and strong and beautiful?"

Today's Knowledge of Food Nutrients

CARBOHYDRATES

Americans are well acquainted with carbohydrates. They know starches well, and sugars even better. America has the highest sugar consumption per capita of any nation in the world. In the year 1938 the sugar consumption per capita in the United States was 102.49 pounds.

Sugar. It may be that Americans have developed a sweet tooth because they live hard, fast, and at high tension. Sugar is digested, absorbed, and then assimilated as rapidly as any other single food. That may be the reason for its popularity. A piece of candy will put new energy into a tired person. It also does something else — it satisfies hunger temporarily and quickly. When it is eaten shortly before a meal, it dulls the appetite for the meal. Candy is intensely sweet and spoils the appeal of foods with bland flavor.

Children who come from homes where there is plenty of money for candy may be underweight to a greater degree than children who come from a home where there is money for bread or potato but not for sweets. The candy eaten too frequently has destroyed the liking for simple foods and dulled the appetite at regular mealtime.

Starches. Starches are found in cereals, root vegetables, tubers, and nuts. Since most starch exists in granules that are separated one from another by means of fibrous materials, we find much cellulose in starchy foods as grown.

During World War II millers voluntarily co-operated with government nutritionists who wished to have flour "enriched" so that it would contain the same nutritive value as unmilled wheat. Then bread, which has a large consumption, especially in families in the low income group, would provide needed thiamin, niacin, and iron. Some millers added riboflavin, calcium, and phosphorus, as well.

The use of starches and sugars in cooking is almost necessitous, since they furnish the bulk of our foods.

Digestion of Carbohydrates. Starch is changed first to dextrin, then to double and finally to single sugars. Dextrin is sticky and comparatively flavorless. Flaps of envelopes stick because dextrin has been applied. That dextrin has a flavor. Is it a characteristic of the dextrin? How and why is it put there?

Sugars are changed in digestion to single sugars. In chemistry classes you get information regarding levulose and invert sugars.

Absorption of starch and sugar cannot take place until they have been changed to single sugars.

A certain amount of excess sugar in the system is stored as animal starch or glycogen. This is ready at a moment's notice to come to the body's aid when unexpected demands for energy are made upon it.

Continued excesses of sugar in the blood stream give fat deposits, and then may even go so far as to upset the metabolism to the extent that diabetes results.

FATS

Characteristics of Fats. If your brother should unexpectedly bring home a hungry friend — of course, that means it's a boy — for Sunday supper and the pantry shelves were quite empty and if you had both chocolate and cocoa on the shelf, which would you make, chocolate or cocoa? Why? The correct answer to that question brings a word which may be new in your vocabulary. Chocolate is rich in fat. Being rich and heavy, it has satiety value. All fats have that quality. Look up the definition in the dictionary.

Why does a piece of bread spread with butter taste better than a slice of dry bread? Why does a crumbly, rich jumble taste better than a dry lady finger?

The correct answer to that question is this — Butter and other shortenings give a good flavor to foods.

Why are bacon, pork chops, and sausage more popular in the winter than in the summer? The correct answer says that fatty foods are needed in the cold weather because fats furnish fuels, and these are needed in the winter time to offset the loss in body temperature as it combats the cold. Fats have fuel value.

Other fatty facts which come to mind are these. Fat is found in few vegetables or in few fruits, avocado pears being the exception, but fat is found in generous amounts in nuts, cream, whole milk, germs of cereals, some fish and in the flesh of certain animals. Different parts of an animal may contain more fats than others.

Oils, lards and hydrogenated fats (that is, those which have been partially solidified by treatment with hydrogen) possess high caloric value because they are nothing but fat. Butter contains a small amount of water as well as possible protein. Butter is one of the fats recommended for inclusion in the daily diet because it contains vitamin A in addition to the other nutrients. Margarines may be irradiated so they too contain vitamin A. Egg yolk contains fat and vitamin A as well.

PROTEINS

Characteristics of Proteins. Cook an egg at too high a temperature and it shrivels. So does cheese. Fish baked or cooked too long at too high a temperature is hard and dry. So is meat.

Those foods must possess something in common to have them act that way. And that common factor is the protein.

There are, you remember, many varieties of proteins.

Some of the proteins are so complicated in their structure that they supply all the protein needs of the human body; others lack certain things. The first type is called complete; milk, cheese, meat, eggs, and most nuts are examples. The second type is the incomplete protein; gelatin is an example. Frequently a food contains both complete and incomplete proteins.

Digestion of Proteins. The end products of protein digestion are amino acids. Those which are not needed in the building and repairing of the body cannot be stored but must be burned and the oxidized products excreted. The nitrogen which is found in every protein thus becomes a waste product. Nitrogen is found in urea. It is found in uric acid. Proteins are acid-forming foods and need to be taken in moderation. When uric acid is a leftover of excess protein food, exorbitant demands are made upon the kidneys. Since the body cannot store protein, excess intake always means excretion above minimum body needs.

Proteins are relatively expensive when taken in the form of meat. They are cheaper when eaten in fish or dried legumes. They are cheapest of all when taken in milk. This is due to the fact that milk furnishes so many other necessary elements at the same time. Then, too, milk is a complete protein.

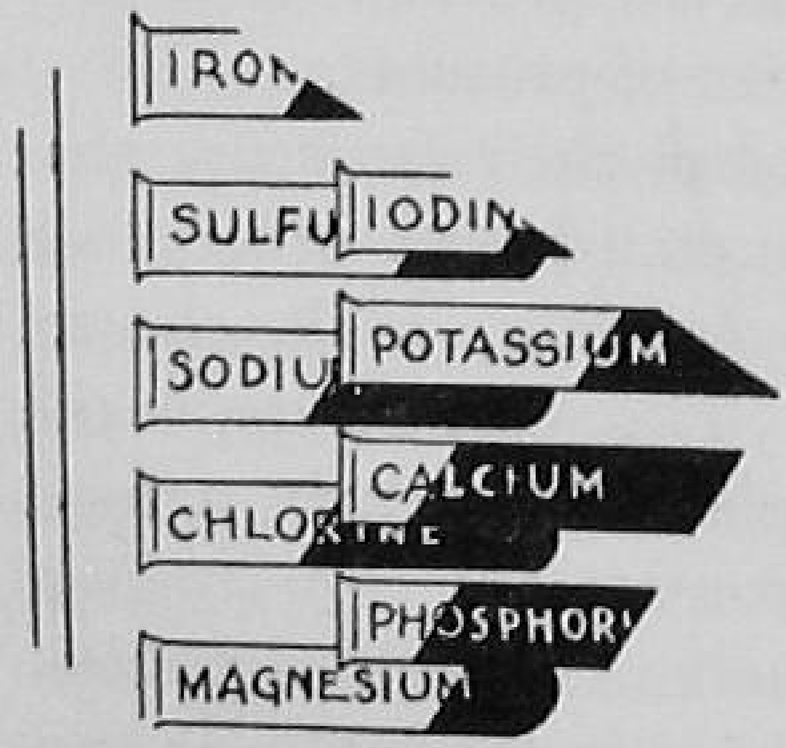
Meat is an important food, not only because it contains protein but because it has fatty tissue and minerals such as iron and phosphorus. It contains some vitamins. The internal organs, especially, are rich in vitamins in the B complex.

MINERAL SALTS

"Where there is smoke, there is fire," and, equally true, when there is fire, there is ash.

All of this talk of burning fuels, oxidizing foods, getting energy and heat has more or less prepared us to think of ash as a remainder.

Many foods contain mineral salts. Mineral salts do not burn. They remain as an ash. But ashes need not be waste, not in the body. For we need these mineral salts to build up bones, hair, teeth, nails. We find them in the skin. They are in the nervous tissue. We find them in glandular secretions. We find them in the blood.



We ought to make those sentences more imperative and say we *need* them in all those body substances. Without calcium and phosphorus in the teeth and bones we have decaying teeth, rickety bones. Without iron in the blood we have anemia. Without calcium the blood won't clot and we suffer from hæmophilia. What foreign nobility has that hereditary taint? Without iodine the thyroid gland acts up and we have goiter. Sodium, chlorine, sulphur, and potassium are needed as well as the minerals mentioned — iron, phosphorus, calcium, and iodine.

These salts are needed to help the body preserve a neutrality. A leaning toward the alkaline side is believed to be even better than a neutrality.

The acid-forming elements are phosphorus, sulphur, and chlorine.

The base- or alkaline-forming ones are sodium, potassium, calcium, magnesium, and iron.

What two salts are found in a common food accessory? Is that food accessory neutral? How do you explain your answer?

To make acid- and alkali-forming elements easier to think about, suppose we name them in terms of food. Plums, prunes, corn, are acid-forming due to hippuric acid foundation. Milk, nuts, fruits, and vegetables are base or alkali forming. Eggs, cereals, breads, fish, poultry, and meats are acid-forming foods.

Do these statements explain age-old combinations of bread and milk, meat and potatoes, cereal and milk?

Vitamins

Discussion of vitamins is as timely as a discussion of headline news in today's newspaper. There is the danger, however, that timeliness may put an untrue valuation upon the subject. Perspective is a good thing, whether it be applied to picture making, world history or foods. Today the public is interested in vitamins to such an extent that information regarding any new fact about them is news.

We talk about vitamins as though they were all alike in structure and, fundamentally, in purpose. This is not true, any more than it is true that all your brothers and sisters are like you. You share the same name and unite, let us hope, in the purpose of keeping that name untarnished by unseemly actions. But actually you are quite different one from the other. Vitamins are alike in that life cannot be sustained without them and in that even moderate lacks of them in the daily diet reduce your feeling of buoyancy or radiant good health.

In actuality, the vitamins differ in their composition and in their functions just as you differ from the other members of your family in looks and in disposition. Much confusion reigned before a definite scheme for naming these nutrients was adopted. At one time they were given an "anti" prefix — "anti-infective", "anti-rachitic", and so on, but these names have been abandoned. We now believe that, while a prolonged lack of a vitamin may be a factor in the incidence of disease, the vitamin itself is not the anti-infective factor.

Letters are used to distinguish the different vitamins: for instance, vitamin A, vitamin B, and so on. The tendency is away from letters, toward names: for instance, vitamin C is now called ascorbic acid.

These chemical inorganic substances — these vitamins — may be fat-soluble or water-soluble. In the fat-soluble group are vitamins A, D, E, K. The last two are only briefly discussed.

Vitamin E, which has to do with prevention of sterility, seems to be of most importance to the reproductive life of the rat. K is definitely related to blood clotting in the chick. Its importance to other animal species is still to be proven.

The fact that the rat and the chick have been cited and that the guinea pig will be mentioned in the discussion of vitamin C tells us that much of our knowledge of vitamins and their functions has come from laboratory experimentation upon test animals. From preliminary facts gathered in this way parallel experimental work can be carried on with human beings who, after all, belong in the animal kingdom. The life cycle of the lower animals is so much shorter than that of humans that results of vitamin lacks and abundances can be obtained in comparatively short times.

The chances are that your own class has been interested in some white rats caged in your science or home economics laboratory. You have seen with your own eyes the drooping, almost lifeless rat that has been fed upon candy, coffee, soft drinks, and buns while "brother rat" is frisky and sturdy after its meals of milk, lettuce, whole wheat, liver.

Scientists are eternally and everlastingly curious, which means that findings accepted yesterday are being questioned in the light of something learned today which will undoubtedly change the truths stated tomorrow. For that reason it is dangerous to state vitamin information too positively, but certain facts seem noncontroversial.

Also certain questions pop up when vitamins are mentioned. In our study of vitamins A, D, C and those in the B complex we ask:

In what food or foods is the vitamin found?

Does it always exist as a vitamin?

What cautions need to be observed in cooking or storing the foods which contain the vitamin?

How much vitamin is needed each day and can excess amounts be stored in the body?

Of what use is the vitamin?

Let's start asking these questions about specific vitamins.

VITAMIN A ($C_{20}H_{29}OH$)

In what food or foods is vitamin A found?

Foods rich in vitamin A are whole milk, egg yolk, liver (especially of fish such as cod, halibut, tuna fish), unbleached lettuce and asparagus, orange-colored Hubbard squash, carrots, sweet potatoes, pimientos, fresh apricots. Note that orange and yellow colors and unbleached green coloring seem to be important in this group. White potatoes, pale summer squash, bleached lettuce and asparagus, egg white are low in vitamin A. So are muscles of meat and vegetable oils.

Does it always exist as vitamin A?

Let's pause for a moment to discuss a "precursor." If you have studied Latin you realize that word means a "fore-runner." If a circus is coming to town there may be an advance procession, say of elephants and spangled ladies. These are the precursors. Later on they take their place as a part of the circus. Substances may exist as advance agents of a vitamin, later to be changed within the body and made into the vitamin. These are precursors. One of them is carotene. It is found in some plants and is now prepared commercially.

What cautions need to be observed in cooking or storing the foods which contain vitamin A?

Vitamin A is not soluble in water, therefore losses in cooking will be slight. Being soluble in fat, an olive or salad oil dressing will carry dissolved vitamin A. A dressing made with mineral oil is not advisable for the following reason: the vitamin is dissolved in this mineral oil, and since mineral oil, unlike olive or vegetable oils, is never absorbed by the body the vitamin A is lost.

Alkaline mixtures do not affect vitamin A adversely, but acid does. Therefore avoid rancidity as well as oxidation. This means it is best to keep oils and fats cool, well corked or covered and stored in opaque containers.

How much vitamin A is needed each day and can excess amounts be stored in the body?

Standards of measurement differ for various commodities or substances. For example, energy is measured by calories, weight by pounds or by kilograms, vitamins by Sherman units as well as by International units, known as I. U. A Sherman unit, roughly speaking, is twice as large as an I. U.

The Sherman unit of vitamin A is defined as that amount of vitamin A which when fed to a standard test rat permits an increase in weight of the rat at the rate of three grams per week for a period of six to eight weeks.

Excess amounts are stored in the body, especially in the liver.

Standards for human well-being are still in the process of being set up. Eight thousand to 10,000 I. U. of vitamin A is the average requirement per child per day. Three hundred I. U. per 100 calories are required per day per adult, or approximately 8000 I. U. daily.

Of what use is vitamin A?

Insufficient amounts of it give these results — lack of feeling of buoyancy, development of night blindness, increased number and increased severity of colds, lack of proper growth, diseases of the respiratory tract, inadequate maintenance of tooth enamel.

VITAMIN D ($C_{28}H_{43}OH$)

Vitamin D has been called the "sunshine" vitamin. Formerly it was known as the "anti-rachitic" vitamin because an adequate supply seemed to have a direct bearing upon rickets, the disease in which bones lack proper growth and rigidity.

As soon as we talk about sunshine in relation to vitamin D we must talk about ultraviolet rays and sterols.

In what food or foods is vitamin D found?

In some fish such as salmon, sardine, and herring; in fish oils. Small amounts are in egg yolk and in butter. Vitamin D is not found in living plant tissue. Vitamin D may be added to foods such as milk, bread, cereals.

Does it always exist as vitamin D?

A precursor, "sterol," is found just below the skin of human beings. When the ultraviolet rays of direct sunshine fall upon the human skin, vitamin D is formed from that sterol. Ergosterol,

another sterol, is found in fungi, yeasts and molds. When activated or "irradiated" by ultraviolet rays, a substance is formed which, dissolved in oil, is known as viosterol.

What cautions need to be observed in cooking or storing the foods which contain vitamin D?

Being soluble in fat but not in water little care needs to be exercised in the cooking of foods containing vitamin D. Fish oils, the most abundant source of vitamin D, are seldom cooked anyway. Vitamin D is like vitamin A in that it is less effective in an acid or a rancid medium. Opaque containers, well corked or stoppered, set in a cool place are one answer for successful storage of oils and fats.

How much vitamin D is needed each day and can excess amounts be stored in the body?

No one is absolutely sure, but 1200 I. U. to 800 I. U. daily for the first two years of an infant's life, 300 I. U. to 600 I. U. daily for an adult, with a great increase during pregnancy and nursing, is advised. Cod-liver oil acceptable for listing in U. S. P. (United States Pharmacopeia) contains 310 I. U. of vitamin D per teaspoonful.

Excessive amounts of vitamin D cannot be stored.

Of what use is vitamin D?

It promotes a feeling of well-being. It enables the body to use the calcium and phosphorus found in foods such as milk, depositing these as bone salts, thereby stiffening bones and favorably affecting the basic structure of the teeth.

Ultraviolet rays are most potent at high noon on a clear midsummer day. When the sun's rays are weaker; when they have to filter their way through fog, smoke, dirt; when they are filtered through an ordinary pane of glass in the window, they have lost their value in great part. Since most of us live in conditions of this kind for the greater part of a year and since vitamin D is so absolutely necessary for body well-being and good body structure it seems wise to fortify at least one food which is taken daily by all of us — milk.

Milk may be irradiated by the addition of a cod-liver oil concentrate, giving to a quart of milk some 400 I. U. of vitamin D; or it may be irradiated by exposing the milk itself to ultraviolet

rays, in which case it contains 135 I. U. per quart; or the cow may be fed irradiated yeast, in which case the quart of milk will contain about 400 I. U.

VITAMIN C ($C_6H_8O_6$)

Vitamin C was formerly called the anti-scorbutic vitamin, and later cevitamic acid. It is now best known as ascorbic acid.

"Lime House Nights" is the title of a book written by Thomas Burke, a modern English author. It tells of the experiences of a group of sailors who frequented an inn in a disreputable part of London. The men were known as "limeys." There is a reason for English sailors being called by that name.

Centuries ago the men who shipped on English vessels bound for round-the-world tours suffered with swollen and bleeding gums. This disease called "scurvy" appeared when the fresh foods in the ship's hold were all eaten and the sailors had nothing but dried or desiccated foods. So long as there was raw potato on board the scorbutic patient could be cured if he could get a little of the raw potato juice. For less severe cases onions seemed to be effective. The disease was conquered when lemon juice or lime juice, fresh or bottled, was added to the diet. Hence the name, "limeys." Scurvy is known as a diet-deficiency disease, the deficiency being ascorbic acid.

In what food or foods is vitamin C found?

Citrus fruits, tomatoes, succulent parts of plants such as cabbage, Brussels sprouts, broccoli, vegetable greens, parsley, red and green peppers, white potatoes, bean sprouts, raw rutabaga or yellow turnips all contain vitamin C. Commercially canned fruits and vegetables are apt to prove richer in vitamin C than home cooked. This is because home-cooked vegetables are exposed to the air during cooking.

The amount found in a given food varies with the kind of soil, conditions of growth, maturity, and length of storage. Milk has a small amount of vitamin C. When the milk is pasteurized and touches copper tubing the amount of vitamin C is reduced. (Copper is unkind to vitamin C.)

What cautions need to be observed in cooking or storing the foods which contain vitamin C?

Hm7

Being soluble in water vitamin C is lost when foods are cooked in water. For instance, five ounces of baked potato will contain twenty-five milligrams of ascorbic acid, but five ounces of pressure-cooked potato contains but seventeen milligrams. Five ounces of boiled potatoes contain nineteen milligrams.

An aqueous solution exposed to the air (It's the oxygen that is dangerous.) is unkind to vitamin C also. Therefore orange juice or tomato juice exposed to the air has lost vitamin C in direct relation to the length of time it is exposed.

How much vitamin C is needed each day and can excess amounts be stored in the body?

The amount needed is approximately 1500 I. U. daily. This finding is based on the results of tests on guinea pigs. Rats cannot be used for the vitamin C test. They synthesize what vitamin C they need, that is, their bodies form vitamin C.

Of what use is vitamin C?

Lack of it makes capillary walls fragile so they tend to leak blood — or as we say, "A person bleeds easily."

Vitamin C is required in the formation and the maintenance of the intercellular substances of bones, teeth, blood vessels. When there is a lack of vitamin C there are apt to be pains in the joints, and bones are easily broken.

VITAMIN B COMPLEX

A piece of string is a unit complete in itself, but if you roll that string backwards and forwards between your fingers you find it may be separated into a number of separate strands. We might call the piece of string "a strand complex," for many strands are united to form that simple-looking piece of string.

The vitamin B complex is quite like that. Recognizing it first as vitamin B — and nothing else — scientists are now untwisting it, and finding numerous kinds of vitamins all belonging (so far as we know) to the general classification of B. They are soluble in water but not in fat. They are seriously affected by alkaline solutions, but not so seriously by heat. Oxidation does not seem to be much of a danger.

Under vitamin B we need to consider vitamin B_1 or thiamin; also what used to be called vitamin G, now known as ribo-

flavin; also nicotinic acid, sometimes called P. P. factor, or pellagra preventing.

THIAMIN OR B1 ($C_{12}H_{17}ON_4S$ Cl.H Cl.)

In what food or foods is the thiamin found?

Thiamin is found in living plant tissue, root, stem, leaf, fruit and seed. Potatoes, legumes, germ and outer layers of cereal seeds, glandular organs, chicken, pork, milk, peanut butter, and eggs have varying amounts. "Beriberi" was cured when a solution made by cooking the scrapings from outer bran coats of rice was fed to patients who had been eating polished rice.

What cautions need to be observed in cooking or storing the foods which contain the thiamin?

See discussion above.

How much thiamin is needed each day and can excess amounts be stored in the body?

It is believed that a normal adult needs 500 I. U. per day. A standard for growing children is 400 to 500 I. U. per day.

It is not stored in the body.

Of what use is thiamin?

Thiamin is necessary for growth of body tissue. It is related to normal functionings of the nervous system, the heart and the alimentary tract. It assists in one stage of carbohydrate metabolism Lack of appetite may be due to inadequate amounts of thiamin.

RIBOFLAVIN, OR G, OR B2 ($C_{17}H_{20}N_4O_6$)

In what food or foods is riboflavin found?

Riboflavin is found in plant and animal tissues. Glandular organs have more riboflavin than muscle of meat; eggs, milk, peas, beans, yeast and wheat germ are good sources. The legumes as they increase in maturity lose part of their riboflavin.

What cautions need to be observed in cooking or storing the foods which contain riboflavin?

Like thiamin, it is but slightly affected by heat, dissolves in water and is definitely and adversely affected by alkali. You can see why beans or peas, for instance, cooked in large quantities of water to which baking soda has been added will have little potent riboflavin left.

How much riboflavin is needed each day and can excess amounts be stored in the body?

Riboflavin taken in excess may be stored in body muscle as well as in the liver. The amount required is measured by a Sherman Bourquin unit rather than an I. U. Six hundred units daily is a good amount.

Of what use is riboflavin?

Riboflavin plays an essential part in cell activity. Lack of it may stunt growth and cause premature aging.

NIACIN, OR PELLAGRA PREVENTIVE ($C_6H_5NO_2$)

In what food or foods is niacin found?

It is found in liver, kidney, meat muscle, fish, milk, evaporated milk, green leafy vegetables.

What cautions need to be observed in cooking or storing the foods which contain niacin?

It is soluble in water, relatively resistant to heat.

How much niacin is needed each day and can excess amounts be stored in the body?

Twenty-five milligrams are needed per day. (Note that this is not stated in I. U.)

Of what use is niacin?

Adequate amounts prevent human pellagra.

Niacin was formerly called nicotinic acid and the two names mean the same thing.

And now that we have assembled all this information about vitamins, what are we going to do about it? Revolutionize our eating? Not necessarily. Foods available to us in the United States are so varied that we need not become frightened about vitamin-deficiency ills. Not, that is, if we always keep in mind the fact that milk, dairy products, fresh fruits, leafy green and yellow vegetables, and eggs are protective foods. They protect us against the well-defined deficiency diseases — ophthalmia, scurvy, beriberi.

We need to give thought to our supplies of vitamin D. These are most apt to be lacking in the usual diet of an American.

Adequate amounts of vitamin A make usable the calcium and

phosphorus in the milk. The leafy green vegetables furnish usable iron as well, so these foods play a double role.

But if we take at least one pint of milk a day, if we eat at least four ounces of leafy green or yellow vegetables — two ounces raw and two ounces cooked — if we eat tomatoes or citrus fruits, if we eat a white potato daily, if we eat dark cereal which means a whole unpolished grain, and if we have one serving of meat, we have eaten for health. We have safeguarded growth, our sense of well-being, and the intercellular structure of bones and teeth. We have guarded against lack of appetite, tendencies toward colds and infections of the respiratory tract. We may say, "Illness cannot come too near me. I have eaten well today."

Water

No one needs an introduction to water, but many people need to know it more intimately (both inside and out).

Fortunately, water is found in milk, in all beverages, in most cooked foods, in raw fruits, and in vegetables. But the human body needs more than it gets in this fashion. The body acquires a small amount of "metabolic water" through the process of metabolism. But six glasses in addition is a minimum requirement — one before breakfast, one at each meal, one in mid-afternoon, and one at bedtime.

Water taken on arising has special virtues. It stimulates muscles to action and promotes the secretion of gastric juice.

Water is needed within the body as a regulator of temperature, as a carrier of soluble material, as a carrier of waste, and as a holder of substance in the tissue in a state of solution.

Cellulose

Examples of food which contain little cellulose are a bar of milk chocolate or a blancmange. Contrast those with a bar of milk chocolate with nuts imbedded in its rich depths, or with a blancmange covered with fresh shredded pineapple. Nuts and pineapple are rich in fiber; they boast the possession of cellulose.

Woody fiber is softened by cooking, but is not made digestible. It sweeps its way out of the intestinal tract and carries waste

material with it. Unless a person is advised by a physician to omit fibrous foods, it is wise to have plenty of fruits and vegetables, eaten with the skins, in the diet.

The intestinal tract of a little child is so delicate that it may be irritated by bran, skins of raisins, fiber in spinach. A state of spastic constipation or a diarrhea may occur from them. Such foods are often omitted from the diet of the child under six years of age.

Bran and agar-agar have a place, but — if the diet is well chosen — not an indispensable place, in the diet of growing boys and girls and adults. Too long-continued use of these, and in too great amounts, takes activity away from intestinal muscles. They become sluggish from disuse, like an unused broken arm kept in a sling.

A Check-up [1]

A well-known scientist in the nutrition field has said it is frequently what *we don't eat* that determines the extent to which foods can guard our health and promote vitality.

The piece of cake one fancies, or other sweet that gives a feeling of satisfaction at the end of a meal, can usually be taken without harmful results when well-planned meals have been eaten. But such indulgences are quite a different matter when the protective foods — milk, fruits and vegetables, and whole-grain cereals and bread — are among those you *didn't* eat!

Do you have as much milk as you should?

Every day:

- 1 quart for babies and small children
- At least 3 cupfuls for other boys and girls
- At least 2 cupfuls for grown-ups
- 1 quart for convalescents, and pregnant and nursing women

If you *don't*, you probably won't have enough calcium to protect teeth and bones; to make the muscles flexible; to control the nervous system; and to carry on all the other duties of this important mineral.

[1] Reprinted through the courtesy of the Nutrition Bureau, Community Service Society, New York City. Taken from "Nutrition Notes," September, 1939.

Do you have as many fruits and vegetables as you should?

Every day (See Basic Seven, page 601):
Orange or tomato if possible
Other fruits, too — fresh or dried
Potatoes and one or two other vegetables
Leafy and raw vegetables often

If you *don't*, you probably won't have enough vitamin A to protect the eyes, ears, and respiratory tract from infections; or enough vitamin C to strengthen the blood vessels and keep teeth and bones sound; or enough iron to build red blood and give vitality; or enough roughage to maintain good digestion and elimination.

Do you have as much enriched cereal and bread as you should?

Every day:
A fortified cooked or ready-to-eat cereal for breakfast
Two or three slices of whole wheat, dark rye, or enriched bread

If you *don't*, you probably won't have enough vitamin B to protect the nerves; to promote good appetite; and to regulate digestion and elimination.

Three good meals a day should be built around these three groups of foods, with enough other foods, chosen from eggs, meat, fish, fats and sweets to meet the need for energy and for muscle-building material.

CLASS ACTIVITIES

1. Keep a record of the food you eat for a week. Check this record to find out how many different kinds of food you have eaten. Group these foods to see how many food groups are represented.

2. Make a list of foods which are high in calcium; a list of those low in calcium. Did your diet include calcium equivalent to a pint of milk? Or a quart?

3. If you find your diet low in calcium, go through your list and make substitutions for the foods low in calcium.

4. Check your food record to see how many foods high in iron were included; how many foods high in phosphorus content.

5. Go over your record and see if you have included foods high in all of the vitamins. If you find your diet to be deficient in

any of these vitamins, decide what changes might be made to secure a more adequate diet.

6. Prepare contrasting exhibits of a day's diet, adequate and inadequate in respect to each of the following: calcium, iron, vitamins A, B, C, and D.

7. Plan a day's diet for yourself including the following: one pint of milk, three tablespoons of butter, one egg, one serving of lean meat, potato in some form, two servings of fruit (one citrus or tomato), one liberal serving of a raw vegetable such as lettuce or cabbage and two slices of graham bread. Add to this list enough food to supply the number of calories you need for one day.

8. See if you can explain the meaning of the following: "A diet to be adequate should be colorful."

9. Secure your exact weight and height. Compare this with a standard table. Calculate the percentage that you are over- or underweight.

10. Start a weight chart, using graph paper. Record both the actual and standard weight for each month of the school year. How does your curve compare with the normal curve?

TEST: *Knowledge of Food Values*

Directions: Below and on the next page are listed foods which might be included in the daily diet. When you feel you have gained from your reading and class discussion a fair knowledge of the classes of foods and those which might be included under each list, test yourself by copying the list of foods and placing after each the letter denoting the type of nutrient in which it is the highest; that is, place the letter "C" after foods which are predominately carbohydrate, "P" after protein foods, "F" after those high in fat, "M" after those high in mineral content (Write after the letter "M" the small letter "c" to show those foods high in calcium, the letter "p" for those high in phosphorus and the letter "i" for those foods high in iron.), the letter "V" after foods high in vitamin, telling by the use of the letters A, B, C, and D those high in each of these vitamins. If a food is high in more than one nutrient, put more than one letter after it, thus: Oranges M V.

1. Oranges
2. Cocoa
3. Milk
4. Bread, white
5. Bananas
6. Meat

7. Potatoes
8. Leafy vegetables
9. Sugar
10. Cheese
11. Cabbage
12. Prunes
13. Raisins
14. Beans, string
15. Bacon
16. Nuts
17. Candy
18. Cream
19. Fish
20. Cereals, whole
21. Spinach
22. Lemons
23. Apples
24. Honey
25. Chicken
26. Peas
27. Rice
28. Macaroni
29. Eggs
30. Bread
31. Cottage cheese
32. Butter
33. Tomatoes
34. Chocolate
35. Corn
36. Carrots
37. Beef
38. Veal
39. Pork chops
40. Liver
41. Cornstarch
42. Celery
43. Grapefruit
44. Salmon
45. Lettuce
46. Mutton

TEST: Uses of Food in the Diet

Directions: Choose the word or phrase that makes the statement true. Only one answer is correct. Thus: Butter is made from

a. Buttermilk *b.* Cream *c.* Skimmed milk

The second answer is correct because butter is made from cream. Write your answers on a sheet of paper.

1. Green vegetables should be included in the diet because they supply the body with

a. Fat *b.* Minerals and vitamins
c. Proteins of a very good quality

2. Minerals are necessary in the diet because they

a. Yield heat *b.* Regulate body processes
c. Yield energy

3. One of the best sources of iron needed to build red blood cells is

a. Spinach *b.* Milk *c.* Potatoes *d.* Bananas

4. The most practical and effective method of obtaining calcium in the diet is to use a generous supply of

a. Milk *b.* Meat *c.* Butter
d. Potatoes *e.* Bread

5. We may have anemia if we do not have in the blood

a. Sufficient calcium *b.* Sufficient iron
c. Sufficient sulphur

6. The greater part of the bones and teeth is made up of

a. Iron and sodium

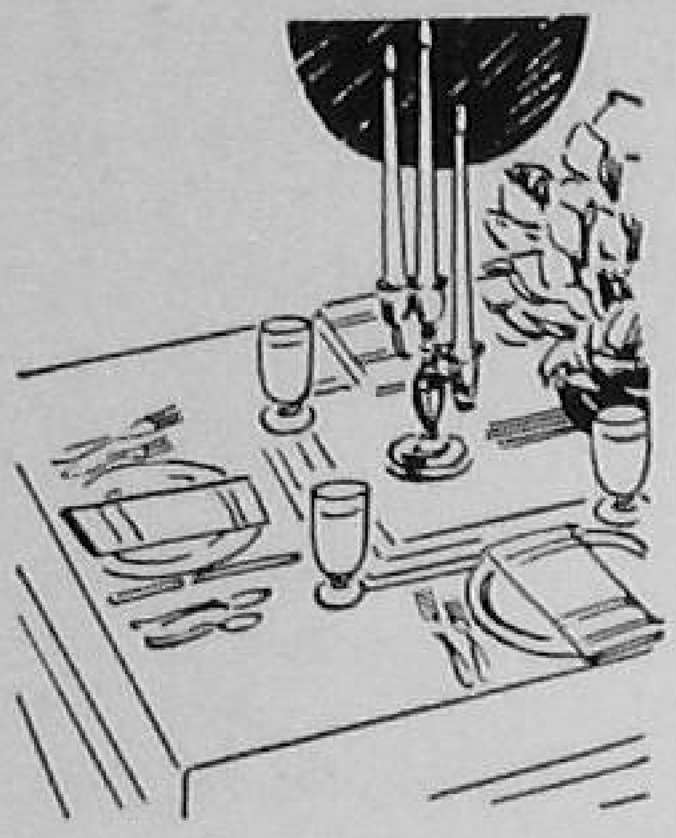
b. Sulphur and salt
c. Calcium and phosphorus

7. Cereals are used in the diet because they are
   a. The most expensive source of bulk and energy
   b. The cheapest source of bulk and energy
   c. A reasonable source of bulk and energy
8. Fats are valuable in the diet because they
   a. Furnish heat and energy
   b. Regulate body processes
   c. Build tissue
9. An excellent protein is
   a. Gelatin
   b. Eggs
   c. Potatoes
   d. Macaroni
10. A disease called scurvy is often due to the lack in the diet of
    a. Meat
    b. Fresh fruits and vegetables
    c. Pastry
11. The indigestible part of a fruit or vegetable is called
    a. The core
    b. The seed
    c. Cellulose
    d. The pulp
12. The body uses water for
    a. An appetizer
    b. An energy producer
    c. Producing energy
    d. Regulating body processes

MEAL PLANNING

At last we plan meals. Are you good at arithmetic? Multiply three by three hundred and sixty-five. What's the answer? Three meals a day, three hundred and sixty-five days a year. No wonder women wish that butchers could invent new animals and that a new Burbank would put his creative genius to work on new fruits and vegetables.

But planning meals is not so hard after all, if you have imagination, plenty of cook books, recipes, and magazine articles — and if Mother has trained the family to eat what is put in front of them.



Suppose there are five members in your family. Suppose one of you won't eat potatoes in any form, another despises mashed potatoes, a third adores mashed potatoes, a fourth wants baked potatoes, and a fifth will eat only creamed potatoes. Sounds exaggerated, does n't it? But such cranky, poorly brought up families exist. They have been spoiled.

Where do you think the original blame lies?

There are a few people to whom certain foods are poison or exceedingly irritating, but the majority of food cranks have too good imagination. They imagine they can't eat this or that until finally they are ill if they try to do so. Locate this quotation — "Much thinking hath made it so." A person who does not eat the foods set before him is ill bred and is offering rudeness to his hostess — and don't forget that at your home table your mother is your hostess.

With which little sermon we turn to menu making.

A meal is poorly planned if it does not take into consideration the other meals eaten during the day. That is because a body needs a certain number of calories, wisely distributed among the nutrients. The body needs vitamins, mineral salts, cellulose, and water.

Well-planned meals take into account: cost; seasonable foods; variety — in texture, flavor, color, shape, temperature; the amount of time required to prepare the meal; and the amount of fuel needed.

What is the matter with this meal?

Cream of corn soup
Chicken fricassée Mashed potatoes
Lima beans
Banana salad
Whipped cream cake

Or with this one?

Potato salad Cold meat
Sliced tomatoes
Ice cream Iced coffee

Or with this one?

Cream of tomato soup
Halibut creole Baked potatoes
Escalloped tomatoes
Lemon pie

Or with this one?

Stuffed green peppers Potato puffs
Succotash
Cole slaw
Shredded fresh pineapple

Or with this one?

Pork chops dipped in batter
Fried egg plant Corn fritters
Shoestring potatoes
Fresh berries on rosettes

There are some dreadful mistakes in those menus. How many can you discover? Can you plan any menus that are worse? It won't be so hard; just think of some of the trays that go past your school cafeteria counter!

Modern menus are simple as compared to those in use twenty or thirty years ago.

And as for the menus of two or three hundred years ago — well, here is a copy of one you may read for yourself:

On November 6, 1429, Henry VI was crowned in St. Peter's at Westminster, and, as the quaint old chronicler tells us, "after that solempnyzacion in the sayd churche fynysshed, an honourable feest in the great halle of Westmynster was kepte, where the kinge, syttinge in his astate, was servyd with .iii. coursys, as hereunder ensureth (ensueth):

I Course. Frument with venyson, Viand royall plantyd losynges of golde. Bore hedes in castellys of golde and enarmed. Beef with moton boyled. Capon stewyd. Signet rosted. Heyroun rostyd. Great pyke or luce. A rede leche with lyons corvyn therein. Custarde royall with a lyoparde of gold syttynge therein,

and holdynge a floure delyce. Frytour of sunne facion, with a flour delyce therin.

II Course. Pygge endoryd. Crane rostyd, Byttore. Conyes. Chekyns endorid. Partryche. Pecok enhakyll. Great breme.

A whyte leche plantyd with a rede antelop; a crowne aboute his necke, with a chayne of golde; flampayne powderyd with leopardes, and flower delyce of golde. A frytour, garnysshed with a leopardes hede, and estryche feders.

III Course. Quynces in compost. Blaund sure, powderyd, with quarter foyles gylt. Venyson rosted. Egrettes. Curlew, Cok and partryche. Plover. Quayles. Snytes. Great byrdes. Larkys, Carpe, Crabbe. Leche of .iii. coloures. A bake mete lyke a shylde, quarteryd red and whyte, set with losynges gylt, and floures of borage. A frytour crispid."

Reading of feasts of earlier days is fascinating. But you marvel that any one lived at all after such gorging.

People did not live so long, at that. Forty years used to be considered a ripe old age in the middle centuries. When you consider the lack of sanitation, the filth, the culinary messes, the prodigious amount of food and drink consumed, you marvel at the punishment the human body stands.

It may be that the time will come when we take our meals in capsule form. If such a calamity should occur, then the menus of to-day will seem as outlandish as do those of the 15th century.

But capsule foods are not imminent, so we won't worry over that; rather we shall take pleasure in planning meals that are well balanced, nourishing, and attractive.

CLASS ACTIVITIES

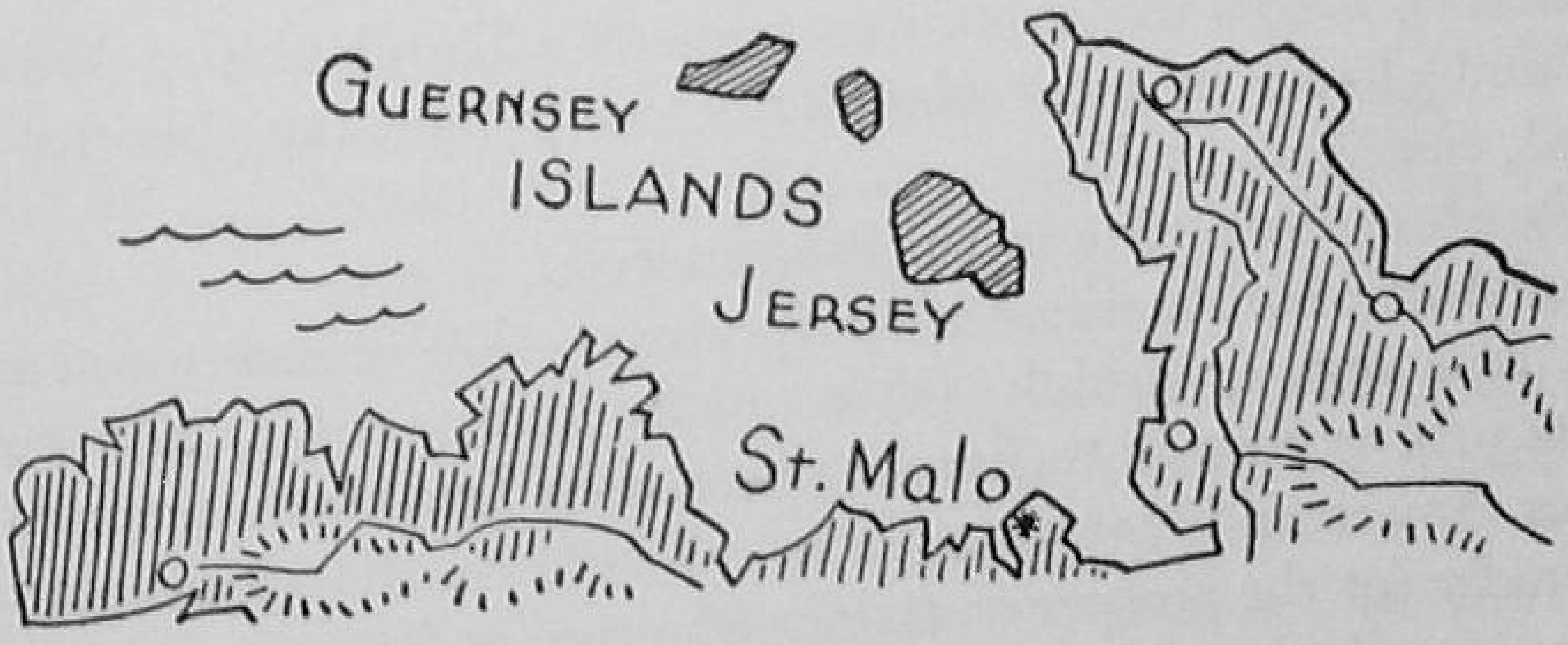
1. Have an exhibit of one hundred calorie portions of food.

2. Calculate your own energy requirement. Plan a day's meals for yourself, taking into consideration the number of calories and the amount of protein needed. Be sure to include the following foods: milk, dark cereal, potatoes, a yellow or green leafy vegetable, one serving of raw vegetable, two fruits (one citrus or tomato), butter, one egg, meat or fish. Check with basic seven.

3. Plan a day's meals suitable for your family including the above foods. Take into consideration all of the factors which you have found characterize well-planned meals.

4. The Johnson family consists of Mr. Johnson, who is a carpenter and who weighs 150 lbs.; Mrs. Johnson, who is a small, nervous woman weighing only 110 lbs. (Her normal weight should be 130 lbs.); Mrs. Johnson's mother, Mrs. Fields, sixty-five years of age and weighing 100 lbs.; Thomas, eighteen years old, a senior in high school, active in athletics and weighing 136 lbs.; Ruth, a sophomore in high school, fifteen years of age and weighing 102 lbs.; Jack, an active boy of ten years of age; and a baby, Jane, who is just two years old. Ruth wants help in planning meals for this family. Plan a day's menus for this family, considering the fact that the family income is $30 per week.

UNIT 2. BREAKFASTS



Years ago one of the authors of this book spent a month in France, leaving by way of St. Malo and the Islands of Guernsey and Jersey for the southern coast of England.

Two or three breakfast experiences have always been fun to talk about. Our stay in France was in a home of people of moderate means. There were two of us in our party. We had a room upstairs from which we came down, morning after morning, only to find that our hostess and family had had their breakfasts. We never did know what they ate, nor when. But we were served on the well-scoured bare table in the kitchen with a bowl of steaming hot *chocolat*, *petit pain*, and *beurre*. It was always delicious,

but the menu never changed. There was no glass of water, no dish of cereal, or bacon, or eggs — just *chocolat*, *petit pain*, and *beurre*. Later we went to Paris. Here our breakfast was *café au lait*, *croissants*. Nothing else. Fresh fruit seemed unobtainable, so did marmalade and eggs.

Our breakfasts at St. Malo were identical with those in Paris. Then we took a small steamer which, in the course of three hours or thereabouts, landed us at the Island of Jersey.

At breakfast time we went to the dining room and encountered bacon, eggs, kippers, porridge, marmalade, toast, and coffee. It took a week for our digestive tracts to get accustomed to this type of breakfast. That breakfast proved that we were in an English dependency and were eating English food.

Another breakfast, which we had in Heidelberg, consisted of crisp rolls, golden honey, and rich chocolate. This pleased us so greatly that years afterwards we bought a chocolate pot that looked like the one on the table set on the terrace of the German hotel. We hoped to recapture the charm of that breakfast.

One trip across the ocean was made on a Dutch ship. We had fish and cheese in great abundance every morning, besides the cereal, coffee, and rolls.

It's great fun eating in various countries.

Our American breakfast of fruit, cereal — hot or ready to eat — ham and eggs or griddle cakes, maple syrup, toast, and coffee seems just as strange to Europeans as their breakfasts seem to us.

Our American breakfasts are heavy because they were planned originally for the pioneer or farmer who rose at five and did a day's work, as we look at it now, before he breakfasted at half past seven. He needed food. He had worked and he was hungry.

A lecturer said recently that by actual count there were thousands of New Yorkers who were entering the subway kiosk ten minutes after they had risen from bed. In that time they had showered, dressed, eaten breakfast, said good-by to the family, and reached the street. And then New Yorkers wonder why they wear out so early, why they have heavy circles under their eyes, and why they need "pick-me-ups" frequently.

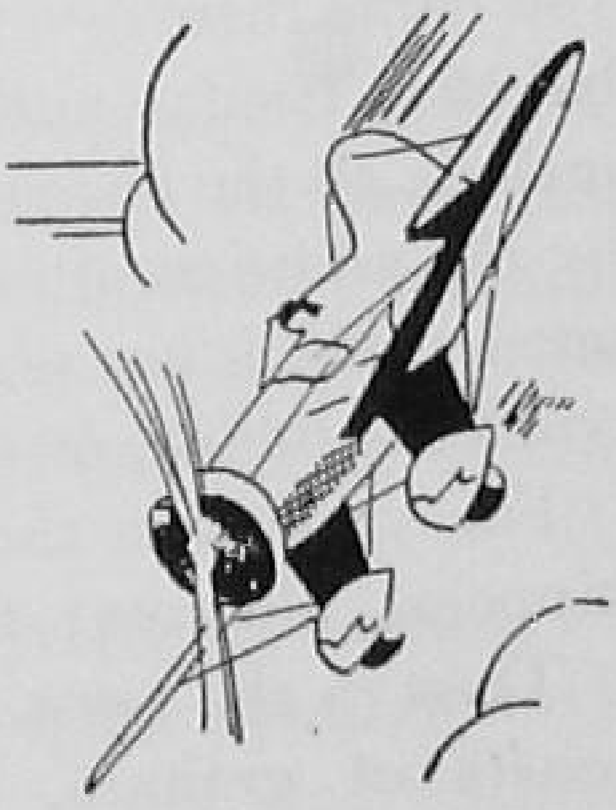
There are girls, high school girls, who are just as silly as the New Yorkers. Sometimes they omit breakfast because they are lazy

and don't get up in time. Sometimes they have heard a slim and slender girl say, "Oh, I just can't eat breakfast." She sounds so superior that the listeners try the tone and sentence in their own home. Sometimes it works — that's when mothers are too easily impressed.

Suppose you were driving an automobile and needed to go one hundred miles during the morning. Suppose you had driven it the night before. But in the morning you say, "Oh, I won't bother to look at the gas tank. I'm late. I must be on my way." Soon the engine stops.

Need we point the moral?

But you say, "Amelia Earhart took nothing but some soup and tomato juice with her when she made her solo flight across the Atlantic. I am not starving myself like that. I can go to the cafeteria for lunch." She was doing a special stunt. Her body, like yours, could respond to emergencies. But getting up day after day, eating no breakfast, is your routine, not a stunt activity. And you pay for it. It may be irritability or failure to score high in a test. It may be a scrawny, drawn look around your neck, where the collar bones stick out like Mother Hubbard's shelves. It may take enough toll so that you hear the doctor say, "Hum, has tuberculosis been hereditary in your family?"



Let's be sensible and eat breakfast. It need not be anything more than fruit, toast, and cocoa. A cereal would be good and the addition of an egg would be even better.

You say you have n't any appetite. We quote once more — "Appetite is not a necessity. It's a luxury." Figure that out.

If you have no appetite, is it because you ate too much food at a party late last night?

You might try drinking some orange juice before you go to bed. That often improves an appetite.

Of course, if you have a chance to be a lazy lady, lying in bed until all hours, having your tub prepared for you, your letters brought up on a tray — but why go on with such a supposition?

You have to get to school and to work. All right, take some fuel to get you there.

Americans believe, fortunately, that a glass or two of water is the best start for breakfast. Fruit follows. In these two respects we are unlike many Europeans.

And as for fruits, there is great variety — orange juice; grapefruit juice; tomato juice; apples, baked, sauced, or raw; prunes; apricots; dried pears; figs; all berries; melons; pineapples; bananas; canned fruits of all varieties.

Cereals served in Europe are less varied than we have here. Can you name enough different cereals to vary the serving for ten consecutive days?

How many ways can you think of serving eggs? May we help you name them? — soft cooked or coddled; poached; scrambled; baked; fried; puffy omelet; French omelet. This does not include all the changes you can ring on scrambled eggs and omelets by the addition of meats, vegetables, or fruits. Do you know the omelet which has orange sections in it, put on one half before the omelet is folded, or the one which calls for conserve, jam, or jelly?

For variety in the hot-dish part of the meal you might serve kippers; bloaters; fish roe; bacon; ham; and sausages.

Then in the toast family are plain; Melba; buttered; French; toasts of graham, entire wheat, rye, raisin bread. There is also zwieback, which is a bread twice baked.

There is fried cornmeal mush which you may have included in your cereals. How about waffles; griddle cakes; muffins; cornbread; coffee cakes?

Jam; jelly; marmalade; preserves; honey; maple syrup; caramel syrup; melted jellies; or heavy fruit syrups offer sweets.

For beverages there is a choice among tea; coffee; cocoa; malted milk; coffee substitutes; decaffeinated coffees. There is cambric tea as well.

Can you see any reason, really, why women say that breakfast menus have to be monotonous? You ought to be able to plan one hundred breakfasts from the suggestions given here and not repeat any one food more than twice.

Breakfast portions should not be too large for girls with fluffy-ruffle appetites. They should not be too heavy for people with

sedentary occupations. Breakfast should not have meat if meat is to appear at both luncheon and dinner. Breakfasts should have some crunchy foods, not all the slip-and-go-down variety.

Fruits

Fruits are the jewels in the food world. We might consider vegetables as trimmings, but fruits are fine and rare like precious jewels.

Fruits and vegetables furnish cellulose, mineral salts, vitamins, pleasant flavors, and variety. A fresh apricot has a "bouquet" which is delicate and pleasing. So has a nectarine. Ripe apples make many a fruit cellar fragrant all through the winter.

Fresh fruits in season make perfect desserts; served just "as is", or chilled and pared.

Even as fruits may finish the day's meals, so they may start them. An American misses fruit if it does not appear on the breakfast menu — orange juice; halves of oranges or grapefruit; prunes, plump and rich in their syrup; apples, baked or in sauce; bananas, sliced and eaten with the cereal — it is difficult to choose among them.

Fruits appear in puddings, pies, tarts, turnovers, shortcakes.

Fruit cup has swept the country as the popular gambit for a luncheon or dinner.

Fruits are canned, preserved, jammed, and jellied. It makes little difference in what guise they may appear, they are welcomed at most tables. Which is all as it should be.

Certain fruits have risen in food circles to great importance.

Bananas are now accepted as good food for babes in arms as well as for adults. But bananas must be so ripe that the skins are covered with freckles — as many as any boy celebrity in the movies may boast. The pulp must be mashed to a purée for infants.

Cranberries have risen in popularity since a way has been discovered to keep them on the market almost all the year round. Use more of them in planning meals. They have food value, vitamins and iodine. They are attractive in color. Consider that in food combinations you make.

Oranges are popular and deservedly so. Their virtues have been overstressed in some of the advertising. Even so, they are

extremely valuable in our dietaries and in that of young children. They are alkali forming, albeit they have an acid flavor when eaten. That alkalinity is in their favor. So is their flavor.

Soda is added mistakenly to such acid fruits as rhubarb and cranberries. The addition does make less sugar necessary, but that saving is overbalanced by the loss in vitamins. Soda is never kind to vitamins.

Perhaps the most maligned fruit is the prune. A prune is a variety of rather sweet plum. Bearing that in mind, one sees the absurdity of hoping to get a delicious sauce when a tender-skinned, rather flavorless fruit is boiled and boiled in a large amount of water.

Prunes should be washed, put in a saucepan with plenty of water, cooked rapidly in that same water, and sweetened only slightly, if at all. Placing the soaked prunes on the back of the range or on top of a heated warming-oven suffices for most of the cooking required. Sliced lemon added while cooking gives a pleasing flavor.

Dried fruits other than prunes are treated fairly well, on the whole, by the cook. Apricots, apples, pears, peaches are available.

The modern method of treating dates renders washing of the packaged type unnecessary.

Never omit, however, the thorough washing of dried currants and raisins.

Candied or glacé fruits are more popular in France than in this country, but are increasing in favor here. It is best to buy them prepared commercially. The same is true of candied citron, orange, and lemon peel for use in cakes, puddings, and fillings for cavities in baking-apples.

Cereals

Years ago a witty Frenchman said that the happiest nations, like the happiest women, have no history.

If lack of anything exciting to comment upon applies to any set of foods, it is the cereals. They are quiet, bland, unexciting.

But their very blandness and quietness are in their favor. "If all the world were apple pie" — think how soon we would grow tired of it. It has too decided a flavor to be relished day in and day out, year in and year out.

Because cereals are not decidedly sharp, or strong, or sour, or sweet we eat them day after day. And if we don't, we ought to.

Why? This is a rhetorical question, and the answer comes from the author — because they have some vitamins and mineral salts, cellulose, carbohydrates, and occasionally a little protein. All those nutrients in one dish!

We get more protein when we put the top milk on the cereal. We really don't need to sprinkle on sugar because there is plenty of carbohydrate already in the cereal. True, it is starch, but then starch becomes a single sugar finally in digestion. A family may be trained not to have sugar on cereal if — and this is a big if — it never sees Dad or Mom put sugar on his or her cereal. That may be too much to expect. What do you think? (Note, this question is *not* rhetorical.)

Cereal manufacturers have done all they can to popularize cereals. They have popped them, roasted them, shredded them. They are crisp and crackly and fairly eat up the milk put on them.

Much may be said for whole or dark cooked cereals, too. Smooth, hot, well-flavored cooked oatmeal, rolled oats, cracked wheat are good enough to eat, and to relish, especially on a cold morning. Cornmeal mush on a wintry morning, or on a wintry Sunday night, with the creamy milk covering the golden mush, and going down into the valleys of the mush, is a food Americans need to count as one of their heritages.

Cereals De Luxe. Sometimes raisins are cooked in with cereals, especially rice. Dates may be cut into small pieces and put in with the cereal, or sprinkled over the top after the porridge is dished.

Put sliced, cored raw apples in with the cereal in the upper part of the double boiler. Both the apples and the granular cereal will be cooked in twenty minutes.

Ripe bananas may be sliced over the top of the cooked, or the ready to eat, cereal.

Left-Over Cereal. Left-over cornmeal mush may be poured, while hot, into a bread pan rinsed with cold water. When cold and firm, the mush may be sliced and sautéed in drippings or bacon fat. Tiny sausages, or sausage cakes, crisp bacon, and maple syrup are the proper accompaniments to this mush on a wintry morning or evening. Sausage meat may be stirred into the corn-meal as it cooks. Then, after molding and cutting, the slices are fried and served with syrup.

Rolled oats, or granular cereals, may be treated the same way. Left-over rice may go into waffles or griddle cakes. Granular cereals may be reheated, sweetened somewhat, combined with egg yolk beaten in a small amount of milk, and then molded in cups. When this is well chilled, it may be used as a supper dessert, with sweetened top milk flavored with nutmeg, or it may be served with blueberries and cream.

Eggs

A French chef once wrote a book on egg cookery that contained over one thousand different egg dishes.

A nutrition authority calls eggs one of the protective foods.

A nutritionist has devoted chapters on chapters in a recent book to the part eggs play in the diet of a human being.

A food chemist has written almost an entire book on the chemistry of eggs and their reactions.

A poultry man has a whole library on the subject of eggs and poultry.

And here we are, discussing eggs and using only a few pages.

Many statements made in this book are brief, but they represent results of hundreds of experiments.

Facts about Eggs. How can you prove that the shell of an egg is porous? (A colorful answer will do.)

A freshly laid egg has a shell which is rough and dull in appearance. Age takes away that dull surface — the shell gets rather shiny. An egg which has been in the nest for some time with the hen resting upon it becomes smooth.

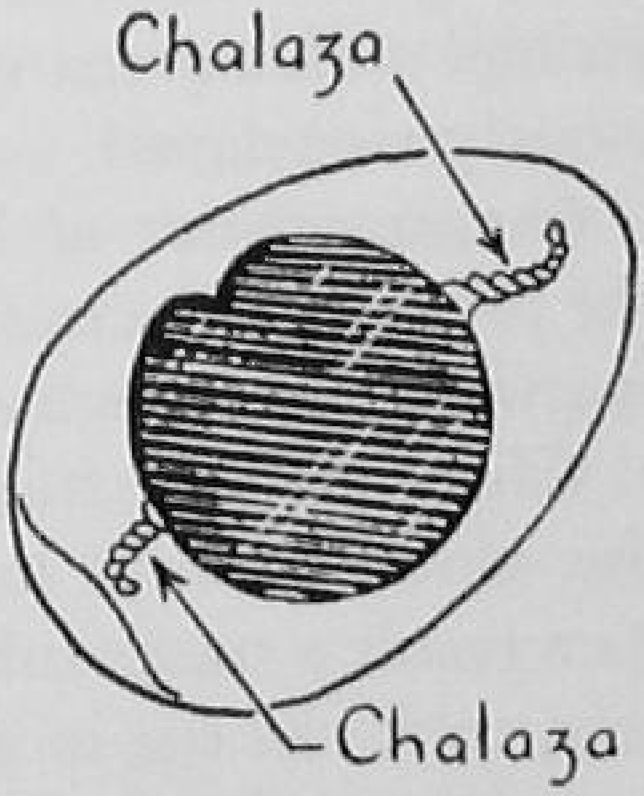
A fresh egg weighs more than an egg which has been kept for some time. Does this statement furnish a second answer to the question of shell porosity?

Grandmother used to put an egg into brine. If it floated, it was not fresh, but if it sank to the bottom, it was. Why?

Eggs are tested commercially by the method of candling. This, briefly stated, consists of holding an egg up to a strong light, which shines in a darkened spot. The interior of the egg is silhouetted. The position of the yolk in this silhouette is a determining factor in the condition of the egg.

This is because the yolk is held in place in the sticky albumin, or white, by means of two membranes or spirals. As the egg gets older the spirals lose their elasticity and allow the yolk to slump towards an end of the egg. When an egg is broken, the yolk stands up firm and plump if the egg is fresh. If it flattens and spreads even within its containing membrane, it is older. Here again the spring and vivacity of youth has left the egg.

Because the shell is porous it is easy to see that moisture may escape and bacteria may enter. That means that a five-day-old egg, let us say, is different in composition from the egg which is new and fresh.



Tastes for flavor in eggs differ — the Chinese like their eggs two or three years old. We want our breakfast egg cooked while it is still warm from the nest, with the hen still cackling about her achievement.

When you think of the nest from which the egg has come and the hands through which it has passed, it is easy to see why we say, "Wash the egg before breaking the shell." It is better to do this at the time of using than to wash a whole dozen ahead of time. Why?

Sometimes a spoiled egg is in among the rest. This cannot be detected until the egg is broken. Therefore it is wise to break each egg separately into a saucer or dish. One spoiled egg can be thrown out, whereas a spoiled egg broken into the others means that all the mixture must be thrown away.

Egg yolks have fat in their composition. This means that it is impossible to beat a mixture of white and yolk until it is stiff. The fat in the yolk coats the albumin of the white and makes it

as slippery as the pole up which the greased pig tries to climb. He slips down more easily than he climbs up. So does the egg white slip and go down.

If we want a fluffly mass of white and yolk, how may we get it?

Egg whites may be beaten until they are so dry they break off into tiny bits. What has happened? This procedure is recommended for foamy omelets, but not for angel food cake. Why?

Egg whites beaten until stiff in a metal bowl may turn rather pinkish. Lowe ascribes this to a combination of the albumin with the copper or iron. The blade of the spatula coming into contact with the egg white gives the same result. There is nothing to be feared from this color.

A hard-cooked egg may show a greenish tinge where the yolk touches the white. This, according to Lowe,[1] is due to the formation of ferrous sulphate. Eggs contain both iron and sulphur. Cooking causes a union of these two. If the egg is cooled at once the sulphate may be dissipated and the green color is then not visible. This green color is no more harmful than the pink, previously mentioned.

Characteristics of Eggs. The albumin in egg white stiffens in the presence of heat. If the heat is too great or too prolonged, the egg white becomes hard.

When one lone fried egg is being cooked in a large frying pan, the white is spread into a thin layer. The fat in the pan is hot. As a result a tough rubbery sheet of white is obtained. To obviate this, cook one egg in an exceedingly small frying pan and have the temperature low. Then the result is a white of firm consistency but lacking any rubbery quality.

Not only do egg proteins stiffen in the presence of heat, but they thicken liquids with which they come in contact during that time.

This principle is used in making custards. Too long cooking, or cooking at too great a heat, hardens the protein. As a result we get a mixture of curdy particles and watery liquid. Where does the water come from? Why would setting custard in a water bath keep it smoother?

The albumin of egg is used in clarifying liquids. Consommé cleared with egg white or bits of eggshell to which some albumin

[1] "Experimental Cookery," Belle Lowe. John Wiley and Sons

is still clinging, coffee cleared in the same fashion illustrate this point.

Egg albumin is soluble in water. Does that explain the process of making poached eggs? Explain your answer.

Egg albumin is slightly stiffened by the addition of salt, or acids like vinegar, or cream of tartar. That principle is utilized in making butterless cakes and in poaching eggs.

The action of the cream of tartar continues while the cake is baking, however, and gives a tender cake. That makes it doubly useful — first it stiffens the egg white so that it may hold more air when beaten and, second, it makes the cake crumb more tender.

Eggs are used for enriching batters and doughs. They furnish a leavening also, since their stretched and beaten walls hold in air which expands in the presence of heat, and lightens or lifts the dough in the expansion.

However, there is a limit to the weight that may be lifted. Take an English fruit cake, for instance. It uses about seventeen pounds of ingredients, plus a dozen egg whites. They can no more lighten that mass than they can fly. It takes a charge of dynamite, nothing less, to make a fruit cake airy. But since we do not want airiness but solid substantial cake, we omit the dynamite.

Usually there are two tragedies in egg cookery. The mixture cooks too long and either curdles, as in unsuccessful custards, or it gets rubbery, as in fried or hard-boiled eggs.

Quick Breads

The Mason and Dixon line does more than divide the United States geographically. It puts the hot-bread devotees south of the line and the "light" bread users up north. .

A breakfast to a Southerner is not a breakfast without beaten biscuit or hot quick bread. A Northerner takes his light bread toasted. Both have hot breads anyway, and each one is sure his dish is the only possible one.

The term "hot bread" or "quick bread" is applied to a flour and liquid mixture which is leavened by steam, by air, or by gases formed by the interaction of acids and alkalies.

The flour which gives best results is one which is rich in starch and low in protein. A winter wheat or an all-purpose flour is preferred.

The liquid is milk, either the plain bottled variety or the evaporated milk.

Eggs, shortening, sugar, salt are added to give palatability to the mixture.

Steam, air, baking powder, soda, and an acid such as cream of tartar, or that found in sour milk or molasses, are the leavening agents.

In popovers, equal amounts of flour and milk are used. Eggs are added. Egg helps to stiffen the starch walls which are expanded by the formation of steam in baking. The water from which the steam is formed comes from that in the milk.

In beaten biscuit the mixture is beaten, or flailed, for a long time. The process incorporates air which expands somewhat in the heat of the oven.

Muffins, gems, corn bread, waffles, biscuit of either soda or baking-powder variety, depend upon gases to leaven them. All of these mixtures belong to the large class called batters. Batters vary from the pour type — such as popovers which call for equal parts liquid and flour — through drop batters — such as griddle cakes or emergency biscuit mixtures — to regular batters of muffins and biscuit. In the last named, there is anywhere from one third to one half as much liquid as flour.

Shortening may vary from none, as in popovers, to four tablespoons per cup of flour, as in cake. Muffins use one and one-half tablespoons, baking-powder biscuits use two tablespoons. Cakes, which come under the head of batters, use approximately four tablespoons per cup of flour.

Much experimentation has been done with both biscuits and muffins. The newest findings are reported here in the general discussions of both mixtures. These findings concern themselves with baking powders and manipulation.

Suppose we start with baking powders. One of the classic wars in the food world is that of the baking powders. To an onlooker it would seem that blame could be attached to both sides. Neither one has had absolutely clean skirts.

To get at that war it is necessary to go back into earlier history.

Without doubt some chemist's wife planned to do some baking with sweet milk and found it was sour. She told her tale of woe to her chemist husband. He said, "Neutralize the acidity of the

milk with an alkali." He gave her crude soda ash. It worked after a fashion, but well enough so that she tried to duplicate it the next time she had sour milk. But this time her milk was not very sour. She used the same amount of soda as before, with the result that her mixture was yellowish in color and had a brackish taste.

She could not get the same result two times in succession. So her chemist husband said, "Why try to depend upon the acidity of milk? It always varies. Why not combine soda with a substance of known acidity?" He used cream of tartar and baking soda. But these two ingredients began to interact in the presence of moisture, and since cans holding them could not be made air proof, dampness would creep in. So he, or some other resourceful person, added cornstarch as a filler or buffer. And it is added to this day.

Other substances besides cream of tartar have been, and are, used to furnish acid in baking powder. There is a phosphate powder and also a sodium aluminum sulphate phosphate. That is the one which was the cause of the bitter war.

Compromises have been made along the way. Some authorities say that the other variables in the mixture — such as baking pan and oven — will compensate for the variations in gas released. Some authorities suggest one teaspoon of baking powder for every cup of flour (with certain modifications for eggs), regardless of the kind of powder. Others advise one and one-half teaspoons. Still other authorities suggest one and one-half teaspoons of the tartrate powder, one teaspoon of the phosphate or the S P powder for every cup of flour.

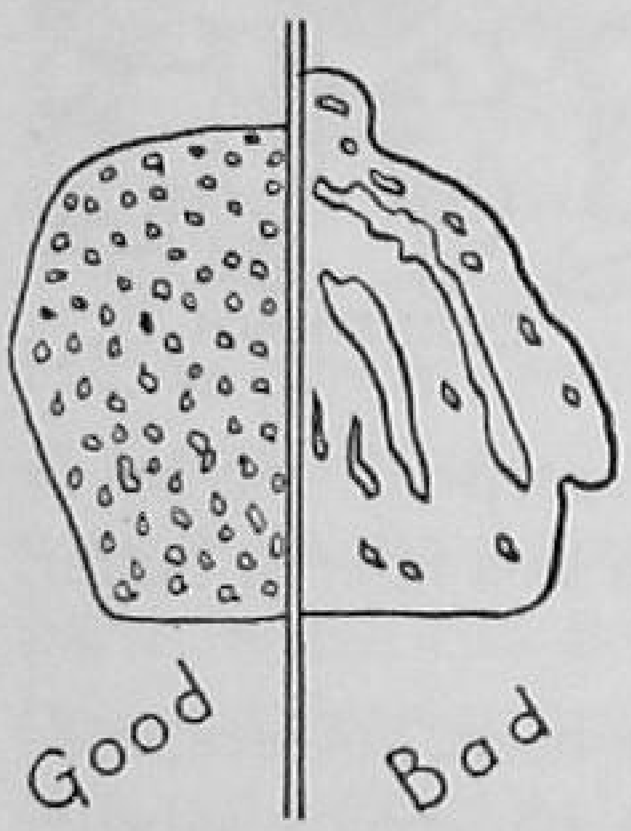
Moisture and temperature are the two factors which affect baking-powder action. S A S phosphate is a slow-acting one at room temperature, but a phosphate powder yields two-thirds of its gas and a tartrate powder reacts even more completely at room temperature.

What effect will that have on the time that elapses between mixing a batter and putting it into the oven? Does that fact explain why less of a slow-acting powder at room temperature is required?

Sometimes the soda is not finely ground. In baking, it shows up as small brown spots. Suppose the batter were exceedingly thin, would there be as many or less or more spots? Why? Suppose the batter were well stirred, what would be the spot situation? Have you seen brown spots in baking-powder biscuits? Would you be more apt to see them in cake than biscuits?

Manipulation may easily be overdone. Too much mixing may be too much of a good thing.

Muffins. A perfect muffin has neither humps and a bumpy profile nor tunneled interiors. All of these are caused by too much mixing, as extensive experimentation in college home economics classes has proved.



We now know that overmixing is less disastrous with tartrate powders than with the other two types. Tunnels may appear because the proportion of flour to liquid is not the desirable one — two parts flour to one of liquid. They may appear because baking temperature is not correct or because the amount of batter in the muffin tin is too great. But, in the main, tunnels do not come if the muffins are mixed with only twenty-five strokes. In other words, the muffin batter is stirred only enough to barely blend the ingredients. The batter is still lumpy.

A perfect muffin has a well-browned rough crust which has only a slight glaze. The crumb is tender, with cells rather large but uniform in size.

Baking-Powder Biscuit. The perfect baking-powder biscuit is even in height, smooth across the top, evenly grained, with well-browned but tender crust. If much crust is desired, the biscuits are placed at least two inches apart on the baking sheet. If little crust is desired, the biscuits are placed so close that they run into one another as they bake. Of the two, the first method is the better.

The experimentation in college classes with baking-powder biscuits has shown that biscuit dough which is tossed onto the board after mixing, and kneaded lightly for twenty seconds results in more even-grained, regular height and shaped biscuits.

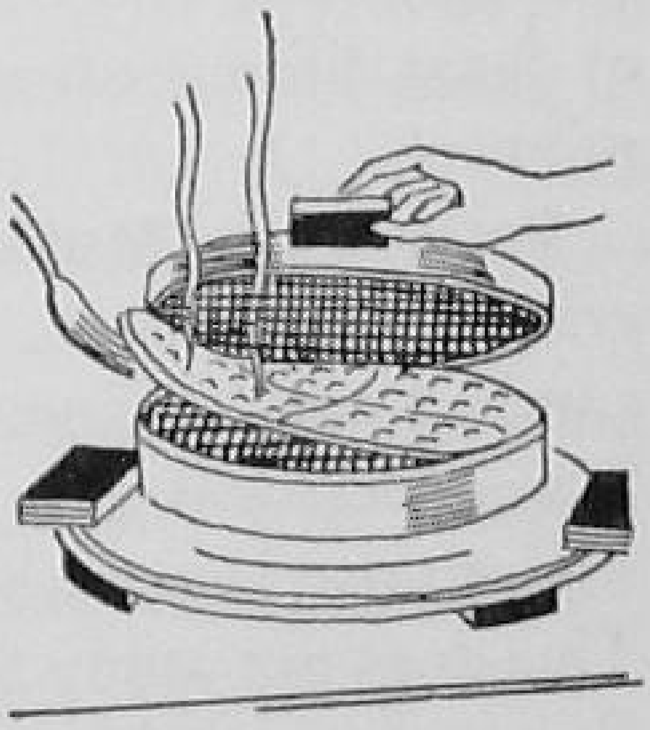
The amount of mixing should be less than was formerly thought necessary. Thirty strokes will combine the liquid and flour-fat mixture sufficiently.

A light-handed and light-fingered person gets better results with biscuits than the heavy, solid working person. Use the tips of the fingers to work the shortening into the flour. Do it lightly and quickly.

Some experiments have shown that a three-tined fork is better for mixing the liquid and flour. It does less packing and mashing down than a spoon.

Popovers. We used to think that long beating of the eggs and of the batter would give a popover that surely popped. Experimentation does not bear out that belief. Temperature which changes liquid to steam and which hardens the walls of the popover and completes the baking are the factors. A thin muffin tin is not advisable for popovers as the thin metal allows the heat to burn the bottom and sides of the popover before the steam has been generated.

Waffles. Crispness is desired in a waffle; so is an even brown crust.



A waffle that sticks to the iron is hard on the disposition. One that is limp is unsatisfactory. A bready one is not popular with the majority of people.

Waffles stick, as a general rule, because the temperature of the iron is not right when the batter is poured in.

Waffles are limp because they are not baked long enough or because they lack richness and sweetening. A sweet waffle comes out from the iron rather limp but stiffens on cooling.

Waffles that are bready have been made from too stiff a batter.

The depth of the depressions in the iron affects texture.

Waffle batter may be mixed up in the morning, set in an iceless refrigerator, and used satisfactorily in the evening. Or it may be mixed the night before for crisp, tender breakfast waffles.

Variation in Biscuits. It is easy to use a basic baking-powder biscuit recipe and change it by rolling or patting the dough flat, spreading it with melted butter, sugar and cinnamon, rolling it

like a jelly roll, cutting off slices and baking them, cut side down; pressing a small lump of sugar in the top of each biscuit, sprinkling a little orange juice over each and then baking; adding grated cheese to the dough while mixing.

Here are some other ways to vary the recipe: A small cooked sausage may be placed on a flat square of dough which is later rolled around it and baked; or an apple may be placed on a large square, and then wrapped completely and baked as an apple dumpling.

A layer of dough may be put on a round pie plate. This layer is spread with melted butter and another layer of dough put on. When baked, you have the foundation and top for shortcake, needing only the fruit to make it complete.

You may flatten the dough in a baking pan, brush with melted butter, add a topping of sugar and cinnamon, and have a baking-powder coffee cake.

Or — well, it's your turn to think up other variations. Look through cook books, ask mother and grandmother, and assemble at least fifteen other variations or uses for this baking-powder mixture.

Variation in Muffins. Muffins may be baked plain, or bits of crisp cooked bacon, fresh or drained canned blueberries, bits of candied peel, or ginger may be added. The flours may be changed. Some cornmeal may be used, or rye or graham flour. It is not wise to use less than half wheat flour if you want tender muffins. This does not apply to graham where all graham flour may be used. But it does apply to cornmeal, and to rye, or to cooked rice.

Variation in Waffle Accompaniment. Waffles may be served with syrup or they may be served with melted honey and butter in equal proportions; powdered sugar, spiced; or with softened butter, cream cheese, and currant jelly as the topping.

Variation in Cream Puffs. Cream puffs are so simple to make, and yet seem so complicated, that home cooks stay away from them. The first cook who had the courage to try such a method of mixing as is used in this mixture was a culinary hero. But the result justified the daring.

Try making these puffs about the size of a silver half-dollar. Slit them when baked and fill them with rich thick creamed chicken

or chicken livers. Serve at "high stylish" afternoon teas. Or fill each one with a plump preserved strawberry.

Bake large ones, cut them into halves, and use each half to hold creamed food, in place of a patty shell.

Try putting ice cream inside the baked shells and topping with whipped cream.

Beverages

Do you select something to drink because of its looks, its flavor, its nourishing qualities, its thirst-quenching powers, its temperature?

Is n't it true that a beverage might be good looking, nourishing, well flavored, and yet fail to please because of its temperature? Above everything else, drinks should be hot or cold, never lukewarm.

Cocoa with a scum over the top, muddy coffee, tea with leaves floating in it, sparkling waters that have lost their sparkle and remain lifeless in the glass are not appealing. The appearance of a beverage has a great deal to do with one's pleasure in drinking it.

Lemonade which is too sweet fails to quench the thirst. Since that is the main purpose for choosing such a beverage, it fails to please.

Let's play a game. "I'm thinking of a beverage which has a smooth creamy flavor, which is creamy white, and cool looking, which satisfies my thirst and my hunger. Guess what I am thinking of?"

The answer is "milk." Notice how favorably we react to that adjective "creamy." It tells something of the story of milk's popularity.

Milk. Milk is the beverage par excellence. It is not a stimulant but it furnishes calories. It helps to build bones and teeth. It adds good looks to people who drink it daily. It contains vitamins. Some of the cleverest ways of presenting the virtues of milk have been worked out by a man named "Happy" Goldsmith. He has a chuckle in almost every line of his material. It may be procured by sending to the address below.[1]

[1] *Some Biting Remarks about You and the Foods That You Eat*, by Clifford Goldsmith. A. S. Barnes and Company, New York

When we add things to milk to make new beverages, we are almost "gilding the lily." Yet who can resist an eggnog made golden with egg yolk, smooth and sweet with nutmeg and sugar, and foamy with beaten egg white?

Buttermilk. Buttermilk is a drink for a hot summer's day — or any other day. Its slightly acid taste and its velvety smoothness — accented by the tiny flecks of golden butter — give it an appeal to people who want a different flavor in their beverages. It is particularly good served with caraway cookies or salty crackers.

Cocoa. There are cocoas and cocoas. Have n't you had a weak, gritty, bitter beverage? That's cocoa made incorrectly. And have you had a creamy, smooth beverage, pleasingly chocolate in flavor, touched up a bit with vanilla and a speck of salt? That's cocoa made correctly.

To get that result you must start with a good brand of cocoa and cook it in water until the starch in the cocoa is cooked. Then combine it with hot milk. You may pour the hot cocoa slowly over a well-beaten egg. It makes a smoother, richer drink.

Commercially prepared cocoa powders are on the market. Some of them are so sweet that the beverage made from them is cloying. Children may love such a drink but that does not mean it is good for them. Such a sweet beverage spoils the appetite for simpler, bland foods. After such a drink milk seems insipid. May we give you a grown-up's secret? A wise mother keeps her children's foods bland and mild as long as possible. Taste which has been spoiled by rich heavy flavors is bored by mild ones. If a child becomes bored early in life, what is there left for his later years? Keep a thrill or two for your twenties or thirties or even your forties. Don't exhaust all life's possibilities in your teens.

Chocolate. Languorous ladies love rich thick chocolate. It is almost a meal in itself, as you will find when you count the calories in one cup of this stimulating beverage. Both chocolate and cocoa contain a stimulant called theo-bromine. A small amount of tannin is found also in chocolate and cocoa.

Both chocolate and cocoa are made from the cocoa bean, but the cocoa fat, or butter, has been extracted from the powdered cocoa, leaving a fat-free powder.

Some hostesses combine hot coffee and hot chocolate in equal proportions and serve it at parties. This good combination is called Mexican chocolate.

Tea. In many parts of France tea is considered medicine. The French use dried flower blossoms for pleasant, aromatic, flowery tisanes. Hunt through foreign cook books for recipes.

Americans should know tea, both green and black, but most of them speak only of "Orange Pekoe — with lemon."

An Englishman uses milk and sugar in his tea. Perhaps that is because his tea is so strong that the lemon favored by the American would precipitate enough tannin to set one's teeth on edge.

A clean, hot china or glass teapot, freshly boiling water, and tea, preferably the finely curled and dried tip leaves of the tea shrub, make a most refreshing drink.

What do you think of tea bags? What precautions must be observed? How about the new ones made of cellophane?

The Englishman takes his tea for breakfast and, of course, at four o'clock in the afternoon. That custom might well be adopted by the high-strung American who is in a state of perpetual nervous tension. Ten minutes daily out for relaxation and the mild stimulation that comes from the afternoon cup of tea may mean ten years more in the arena of affairs. A cup of tea hydrates the body.

Coffee. Coffee can be so good, and it is usually so dreadful. It is no wonder that the beans are a dark brown color. They have sunk into the depths of despair over the things that happen to them. To prove that, the French ones are darker brown than ours — and many Americans believe the French coffee is worst of all. The French roast coffee beans almost to a state of scorch with a consequent acrid flavor.

No listener on the radio the last few years can have failed to get a coffee education — such as it may be. Claims, counterclaims, statements, contradictions have followed one another. Perhaps the only statement worth heeding is this one — freshly roasted coffee should be packed in air-tight containers shortly after roasting.

There is an oil in coffee which becomes, like all oils, rancid when exposed to the air. A whole bean exposes less surface and therefore the rancidity is less than in ground coffee. For that reason housewives are advised to grind the coffee at the time of using and to keep the remainder in as nearly air-tight containers as possible.

Coffee may be boiled, percolated (which usually means boiling), or dripped. The last method is preferred by connoisseurs who want the lively sparkle in coffee. Those who prefer a smooth, full-bodied flavor choose the boiled method. If only women would keep the percolators clean and follow the directions absolutely, there would be less poor percolated coffee. But because one can set the coffee "perking" and go away and leave it, and because the percolator has some rather narrow tubular parts in its make-up, and because there is an oil in coffee, and because women are not careful about the cleanliness of the percolators, most percolated coffee settles down into a dark discouraged liquid and says, "Oh, what's the use?"

Both coffee and tea are affected by the composition of the water used in making them. For that reason it may be wise to have a chemist analyze the water. Armed with that report you can send to a coffee company and get the blend which will taste best with your local water supply.

Both coffee and tea contain stimulants. Young folks like you have enough sparkle and exuberance of your own. You don't need a stimulant. Keep it for your tired twenties and thirties.

Iced Tea and Coffee. If both tea and coffee are made sufficiently strong to stand a large amount of dilution, the iced beverages will be at their best when the hot liquid is poured into a tall glass filled with rather large ice cubes.

Sparkling Beverages. Many new recipes have been evolved, and are being worked out, for sparkling waters. Watch magazines for advertisements of companies making aërated beverages. Get their new recipe booklets and then try some of the recipes.

Fruit-Ades and Punches. No fruit-ade worth the name is made by adding raw sugar to fruit juices and water. Rather, make a syrup of water and sugar. Cool it. Use it for sweetening. To this add the fruit juices, the water, the ice, and the sparkling beverage.

In fruit punch use a strong tea decoction as a base. It does something pleasant to the beverage, and yet remains discreetly in the background. It's well-bred and brewed tea. Maraschino cherries, wedges of pineapple, pieces of orange may go in fruit punches if you want your guests to do a balancing seal stunt or if you are content to see food wasted. If you are annoyed by both those happenings, you will omit the fruits.

CLASS ACTIVITIES

1. Plan a series of breakfasts using such combinations as:
   a. Fresh fruit, toast, beverage
   b. Dried fruit, cooked cereal, toast
   c. Fruit or cereal, muffins, beverage
   d. Fruit, griddle cakes or waffles, beverage
   e. Fruit, eggs or meat, beverage, hot bread

2. Decide which of these breakfasts you would like to prepare and serve first. Using each of these breakfast menus as a basis, decide what foods should be included in the other two meals of the day in order to have an adequate day's diet.

3. If you decide to serve menu *a* first, make a study of fruits, considering their composition, value in the diet, economical purchase, methods of preparation and serving.

4. Your teacher or some group in the class may demonstrate the preparation of those fruits with which you are not familiar.

5. If you have not prepared the beverage before, ask your teacher to show you how so that you may know the best procedure and what good cocoa or hot chocolate should taste like. Read page 504. Find recipes.

6. Divide the class into families of from four to six girls. Suppose a group of four comprise a family. Two of this group prepare and serve the meal. It is understood that the girls who have prepared the meal sit down and eat the meal with the other two. When the next breakfast is prepared and served, the rôle of guest and hostess is reversed. During one class period there will be as many breakfasts served as there are family groups in the class.

7. Before the meal is prepared and served, a plan should be made out by those doing the work, including the market order,

individual time schedules, duties of individual members, order of work, recipes to be used, lists of dishes to be used and utensils to be used, and plan of service.

8. The girls who prepare and serve may act as hostess or mother, and as daughter or waitress.

9. After you have prepared and served your first meal, you will want to discuss the following:

a. How did the foods we prepared compare with the standard product we desired?

b. What were the good and bad points in the serving of the meal?

c. Was there room for improvement in table manners?

10. The class may prepare and serve the other pattern menus.

11. As you include new foods in your menus, make a study of them as was outlined above for fruits. For example, before you prepare cereals for breakfast read pages 479–80.

12. After a class demonstration, each one may want to try her hand at making muffins or baking-powder biscuits. You might try them at home before you prepare them for your meal at school.

13. When you are divided into groups with one group preparing a meal, the others may be doing some interesting things such as:

a. Reading magazine articles on breakfasts

b. Making plans for the meal you are to serve

c. Figuring on the costs of the meal you served previously

d. Laundering the table linen that you used for your meal or that you expect to use when you serve

14. Suggested home project:

Plan, prepare, and serve a series of breakfasts for your family at home. If you must leave for school early in the morning, you might plan to serve the Saturday and Sunday breakfasts for a number of weeks.

15. Prepare a list of fruits which may be eaten for breakfast and arrange them according to seasons.

16. Various members of the class might give reports on different fruits, their source, selection, cost, and ways of preparing.

17. Prepare a table giving proportions of water for common uncooked cereals used as breakfast foods, the amount of cereals used, the amount obtained after cooking.

18. List a series of ways of testing eggs for freshness. Try out as many as possible.

TEST: Preparation of Breakfasts

Directions: Below is given a list of foods which you might prepare for breakfast. The numbers represent either various steps in the method of preparation of these foods or the entire process involved in the preparation. On a sheet of paper make a list of the foods. You are to indicate the proper methods of preparation for the various foods by placing the numbers which represent one step in or the entire method of preparation of this food at the right of the food. Thus, for example, if toast should be placed under the broiler flame until it is a light golden brown on both sides, then should be buttered while hot, the numbers 10 and 17 would be placed after the word toast, since these numbers represent these methods of treatment, thus: Toast 10, 17

Rules for Preparation

1. Stir in boiling water in the top of the double boiler over the direct flame
2. Mix with sugar, add water, boil 5 minutes. Heat milk and add to hot cocoa paste. Beat and serve while hot
3. Beat the egg, add the milk and melted shortening. Put mixture into dry ingredients. Stir just enough to combine and bake in hot oven
4. Place eggs in enough boiling water to cover
5. Cook for five minutes directly over the fire, then in upper part of double boiler for the required time
6. Wash in warm water, soak a short time in hot water, then cook in the same water

7. Mix with a small amount of cold water, and a little washed, crushed egg shell. Add boiling water. Let mixture boil three minutes
8. Beat yolks until stiff and lemon colored, add milk or water
9. Remove eggs from boiling water in three to five minutes
10. Place under the broiler flame until it is a light, golden brown on both sides
11. Beat whites until stiff
12. Cut in half, loosen sections
13. Fold whites into yolks, place in slightly oiled skillet, and cook at a moderate temperature
14. Crease at right angles and fold with a spatula
15. Remove center and skin between sections
16. Peel, removing all the white, then slice in rather thin slices
17. Butter while hot

Foods to Be Prepared

a. Cereals
b. Oranges
c. Grapefruit
d. Prunes
e. Muffins
f. Omelet
g. Soft-cooked eggs
h. Cocoa
i. Coffee (boiled)
j. Toast

TEST: Application of Principles

Directions: On the right-hand side of the page are listed some foods which you might prepare for breakfast. On the left-hand side are some principles of food preparation which you might apply in the preparation of these foods. On a sheet of paper place the numbers 1 to 13. Opposite these numbers, which correspond to the foods being prepared, write the letter or letters corresponding to the principle or principles which you would apply in the preparation of this food. Since principle *d* — "dry heat 320° F. changes starch to dextrin" — is applied in the making of toast, in the space to the right of this food the letter *d* is placed, thus: 1. Toast *d*

PRINCIPLES	FOODS
a. Heat and moisture cause starch grains to burst the walls of cellulose that inclose them	1. Toast
b. Starch swells and thickens liquids in the presence of heat	2. Granulated cereal
c. To prevent lumping of starch grains, fat is used to separate the grains of starch before adding hot liquid	3. Coffee
d. Dry heat 320° F. changes starch to dextrin	4. Eggs
e. Volatile oils which give flavoring are soluble in water and pass off in steam	5. Prunes
f. Boiling extracts tannin and makes the product bitter	6. Cocoa
g. A lumpy product is prevented by separating the starch grains with sugar before the addition of hot water	7. Apricots
h. In order to restore the amount of water lost in drying, wash the food in warm water, soak in hot water for several hours, then cook in the same water in which it was soaked	8. Muffins
i. Albumin does not require a high temperature for coagulating; it is toughened by too high a temperature	9. Oatmeal
j. Rapidly boiling water may be used to separate the ground cereal so that the product will not be lumpy	10. Baking-powder biscuits
k. Air, steam, and carbon dioxide are the leavens which lighten quick breads	11. Creamed dried beef on toast
	12. Omelet
	13. Poached eggs

TEST: Judging the Appearance in Foods Prepared for Breakfast

Directions: Several ways are given from which you may choose to complete each of the numbered statements. Choose from these statements those which you think complete the statement correctly. Write your answers on a sheet of paper.

1. A perfect muffin has
   a. A well-browned, smooth, slightly glazed crust
   b. A lightly browned, rough crust with no glaze
   c. Tunnels in it
   d. A tender crumb with rather small cells, uniform size
   e. A tough crumb with large cells different in size
2. A good baking-powder biscuit is
   a. Even in height
   b. Rough across the top
   c. Evenly grained
   d. Slightly browned
   e. Firm all the way through
3. Cocoa should
   a. Be a smooth creamy beverage
   b. Have a scum over the top
   c. Be a dark brown beverage, strong in chocolate flavor
   d. Be without a raw taste
   e. Be very sweet
4. Coffee should
   a. Be a clear, sparkling beverage
   b. Have a muddy brown color
   c. Have a full-bodied flavor
   d. Be very weak
5. In soft-cooked eggs
   a. The white should be tender and jelly-like
   b. The yolk should be hard
   c. The white should be partially cooked
   d. The yolk should be soft, yet unbroken
   e. The white should be very firm and dry
6. Fine-grained cereals when cooked should
   a. Taste of the raw starch
   b. Be free from lumps

c. Be thin enough to pour
d. Be thick enough to chew

7. Plain omelet should
   a. Have a delicate brown color on surface
   b. Be evenly colored throughout
   c. Be very light and tender
   d. Be rolled or folded twice
   e. Be flat and well browned
8. Stewed prunes should
   a. Be thoroughly cooked so that they fall apart
   b. Be tender and unbroken
   c. Be plump with the pit loose
   d. Have a thin, transparent, watery juice

UNIT 3. SUPPERS, LUNCHEONS, AND BOX LUNCHEONS

No meal of the day has as many names, nor appears as many different times, nor in as many settings as this one. We may call it supper, luncheon, lunch-box meal.

Sometimes it is eaten so early in the morning that it deserves a fourth name — "brunch", that meal which is taken midway between breakfast and lunch and partakes of the character of both. Sometimes we might call it "lundi" or "lundin." Why?

This meal, like all meals, should contain one hot dish. It may be soup, preferably a cream soup. It may be a creamed dish. It may be a hot vegetable eaten with bread-and-butter sandwiches. It may be a hot dessert or a hot beverage.

What else should be in the lunch? Milk in some form, since dinner may be low in that food. Does that help to explain the cream soup or the creamed dish?

The menu should include a leafy green vegetable. That's easy for salads — with the lettuce eaten, mind you! — not left in solitary state on the plate — or celery, or match-like strips of raw carrot may all be called leafy vegetables.

The menu needs something to give body and substance to the meal, for it's a long time until dinner hour. That brings in a breadstuff of some sort. It may be a sandwich with lettuce or cress — a leafy vegetable. It needs to have a sweet or an energy-giving food for the basketball game, or the walk home, or the

errands to be run. It needs some fats to give fuel and to cushion nerve ends so you don't snap up small sister when you get home from school.

All of those needs may be easily met — even in a simple meal. Here are four types of luncheons:

Cream of potato soup
Shrimp and celery salad Bread
Baked apple with candied peel and raisins in the core cavity
Cocoa

Minced beef sandwich
Stuffed celery
Fresh tomato cut into quarters
Baked custard Filled cookies
Cocoa

Escalloped oysters
Bran muffins Cole slaw
Banana ice cream
Corn flake macaroons
Milk

Chili con carne
Crackers Celery
Fruit gelatin — Custard sauce
Milk

School Lunches.[1] Even a plain everyday lunch becomes more

interesting if it is attractively packed. Start with a lunch container that can be well aired and kept clean and sweet smelling. Have plenty of heavy paraffin paper, small containers like jelly

[1] From "Nancy Page." Publishers Syndicate, Chicago.

glasses with tight-fitting covers. Heavy waxed paper cups are now obtainable with tight-fitting lids. Pressed paper forks and spoons, gaily flowered or colored napkins, and paper plates and small dishes add to the appearance of the lunch box. If a thermos bottle is used, be sure that it is aired over night. Don't let the cork get old and liquid-logged, as it will taint the beverage in the bottle.

Sandwiches are the mainstay of a packed lunch. Use white, entire wheat, graham, raisin, or brown bread. Have the slices fairly thin and evenly cut; butter well to edges and do not cut off the crusts. Meat loaf, roast beef, roast lamb, roast pork, ham, crisp bacon, and summer sausage are good fillings. Omit the pork and sausage for small children. Cream cheese combined with chopped nuts, olives, green peppers, or ginger make satisfying fillings. Jelly or jam with or without cream cheese is a favorite. Lettuce, shredded or cut into ribbons with scissors, combined with a salad dressing is good. So are tomatoes or cucumbers. In all of these sandwiches care must be taken lest the juicy vegetable or salad dressing soak the bread. This is avoided by buttering the bread well before adding the filling.

Whole tomatoes, peeled and seasoned with salt, may be packed in the covered dishes. A serving of potato salad, chicken salad, or tuna fish will be acceptable if packed in the covered container. Hard-cooked eggs, accompanied by a small envelope holding a mixture of salt and pepper, are always popular. So are deviled eggs. Relishes such as celery, match-like strips of raw carrots, olives, pickles, pickled peaches, pears or sweet apples, add zest to a meal which is apt to be dry.

A sweet of some kind is needed. This may be filled cookies, a simple cake, baked custard, baked apple, baked pear, or canned fruit. Any one of these juicy desserts will carry easily in the covered container. For the older students a piece of pie, a turnover — apple or mince — or a fruit tart is quite in order. But pastries do not belong in the lunch box of the child in the grades or in junior high school.

Tuck in a surprise package. It may be a lollipop, a few stuffed dates or prunes, a few salted nuts, spiced or caramelized nuts, some lemon drops, gum drops, a nickel or dime to buy some ice cream. Whatever the surprise may be, vary it from day to day.

The beverage may be milk, cocoa, lemonade, or fruit punch. In winter time have a hot beverage, or put a hot soup into the thermos bottle.

Soups

What's the most famous soup in literature? Look in *Alice in Wonderland* for the poem beginning "Beautiful soup so rich and green." Look up Thackeray's celebrated poem in praise of Bouillabaisse. Remember the fruit soup Uncle Bhaer wanted Aunt Jo to have Daisy make? What about the potato soup planned for six and stretched to serve eight? Mrs. Wiggs of the Cabbage Patch worked that wonder with the aid of water. Not a practice to be recommended, for watered soup like "watered stock" lowers the quality. The Cape Codders refer to a thick fog as "pea soup." That tells you what kind of soup they eat. Brown casserole, crusty bread made rich with melted golden cheese half submerged in amber-brown onion soup, checked red and white tablecloth, open-air restaurants — there is one picture of France.

By doing a bit of searching you find that each nation has one soup which is famous. What is the Russian soup? From what country do we get cock-a-leekie? Why do you suppose the European nations make so many soups from root vegetables? What country was supposed to be on its way to happiness when *croûte-à-pot* was cooking on the stove of every family?

North America is known for its chowder, so called from the *chaudière*, the pot which a group of shipwrecked émigrés rescued from the water. In it they cooked fish (caught in the water) with pilot's crackers, potatoes, and bacon. That dish was thick enough to be a stew, but, like Mrs. Wiggs, we have watered it until now a chowder is liquid which may be eaten with a soup spoon.

What is the most famous banquet soup in the United States? You are not old enough to have suffered through countless meals at which a thick, pale pink, rather brackish mixture appeared as the first course. That dish is supposed to be cream of tomato soup. The soup is pink, methinks, because the tomatoes blush to see to what depths they have fallen.

In reading cook books we find that soups may be classified as follows:

Soups with meat stock, soups with vegetable stock, cream soups, fruit soups, chowders.

Meat-stock soups may be crystal clear, amber in color. These are bouillons and consommés. They may have small pieces of meat, match-like strips of vegetables, or barley, rice, or macaroni in their depths.

Soups with vegetable base lack the meat flavor but gain a certain richness by having some of the vegetables sautéed and then cooked. Frequently oatmeal or rolled oats are added to this type of soup.

Cream soups are made with butter and flour cooked to bubbling, called a *roux*, and used to thicken milk and a vegetable purée. If cream is substituted, we get a *velouté* or velvety soup. If a thick mixture, such as that obtained from cooked and sifted split peas, dried beans, even potatoes, is added to the milk, we have a purée. A bisque is a combination of finely pounded shell fish and a cream-sauce foundation.

Fruit soups call for fruit pulp sifted, added to seasoned water or chicken stock, and then sweetened just enough to mellow the flavor.

Chowders have been described previously.

Gumbo soups of Creole fame use okra pods and filé powder as the indispensable ingredients.

The modern homemaker is wise when she keeps a supply of canned soups on her pantry shelf. They are well flavored, quickly prepared for serving, time saving. Too, they offer a variety of out-of-season flavors. Try combining two or three soups. The resulting taste is different.

Soups, no matter in what class they may be, should be served hot or cold, never lukewarm.

"I know thy works, that thou art neither cold nor hot; I would thou wert cold or hot. So then because thou art lukewarm and neither cold nor hot, I will spew thee out of my mouth."

Cream Soups. A chart on page 521 gives the most important facts regarding cream-soup making.

Here are additional facts:

It is wise to rice the hot, freshly cooked potato right into the thin cream sauce. The two blend completely, producing a rich creamy soup.

Asparagus and tomato contain acids. Therefore, precautions must be taken in combining the vegetable purée with the cream sauce.

To avoid a curdled soup:

1. Instead of putting all the roux with the milk, add half of it to the vegetable purée. The slightly thickened purée does not curdle the milk mixture as quickly as if it were unthickened when added.

2. Neutralize the acid in the vegetable by the addition of a small amount of soda. This is not to be recommended: first, because soda is not too kind to vitamins; second, because too much is usually added. The resultant soup is flat and brackish in flavor.

3. Make the thin cream sauce in usual fashion. Pour the vegetable purée, which is acid, slowly into the milk mixture. The volume of milk is so much greater than the acid purée that curdling is delayed. If you should pour the milk mixture slowly into the large amount of acid, you can see what the acid would do to the milk.

4. Do not combine mixtures until just before serving time, and do not reheat the mixture over a direct flame. If reheating is required, do it in the upper part of a double boiler.

Soup Accompaniments and Accessories. The imagination and ingenuity of the hostess seems to be a minus quantity when it comes to soup accessories and accompaniments. There is such a wealth of material in "The Book of Unusual Soups" that it is folly to try to improve upon it. Study that book. Such things as capers, bits of candied fruits, barberries, fried apple balls, corn-meal mush diamonds fried in deep fat, grated cheese, popped corn

are mentioned here merely to whet your appetite and stimulate your imagination.

Creamed Dishes

Creamed dishes deserve a chapter to themselves. They are good, they are numerous, they are varied in type.

Basically, they call for a foundation sauce made of milk, butter, and flour. This sauce is called white, or cream, sauce. White refers to its color, and cream should refer to its consistency. We stretch a point when we say that, for a cream sauce may be so thin it runs like top milk, so thick it resembles cream such as they have up in Vermont — so solid it has to be spooned from the pitcher.

Real cream is not lumpy. Unfortunately, cream sauces too frequently are. Under the circumstances perhaps white sauce is the better term to use.

These sauces are described as being thin, medium, thick, and very thick. The result is obtained by increasing the amount of flour used per cup of milk. The butter is varied somewhat but in not so great a degree.

Thin white sauce uses one tablespoon flour and one of butter for one cup of milk.
Medium white sauce uses two tablespoons flour and two of butter for one cup of milk.
Thick white sauce uses three tablespoons flour and two of butter for one cup of milk.
Very thick white sauce uses four tablespoons flour and three of butter for one cup of milk.
One fourth teaspoon salt and a few grains of pepper are used in any of these sauces.

Just as there are various thicknesses of sauce, so there are various methods of making.

First is the most hygienic and the least flavorful method:

Heat the milk in the upper part of a double boiler. Reserve a little cold milk to stir with flour. When milk is hot, add the thickening. Stir and cook for twenty minutes. Add butter and seasoning.

The second method calls for a roux, which is nothing more than a combination of the butter melted and blended with flour in a

frying pan. To this roux is added the milk, in two installments. After the first half goes in, the mixture is stirred and cooked until bubbling, then the second half is added. The sauce may be made in the frying pan.

The third method gives the best flavor but requires the most care in making. The butter is melted, the flour added, and the roux cooked until medium brown, then the milk is added as in the previous sauce.

Browning the roux gives a richer flavor, but care must be taken lest the temperature get too high and decompose the butter.

Thin white sauce is used for cream soups, creamed potatoes, macaroni, cream toast. In each of these last-named foods, the added ingredient is starchy and possesses thickening power of its own. Therefore, it is not wise to start with a thick sauce.

Medium sauce is used for vegetables and for fish in scalloped dishes.

Thick white sauce is used in soufflés.

Very thick white sauce is used as the binder in croquettes.

Possibilities in Creamed Food Combinations. The above paragraphs have given the type uses for white sauce. Here are other possibilities:

Creamed salmon, tuna or crab meat, to which green peas are added, becomes a dish called a wiggle. Guess why?

Creamed foods put into a baking dish, covered with buttered crumbs, and baked until bubbling are called escalloped dishes. The original ones were baked in scallop shells. Find a picture of one of these shells.

Cooked sliced potatoes and sliced eggs are combined with a sauce to make Oakhill potatoes. Undoubtedly, this dish is named after some inn which made a specialty of this excellent combination.

Occasionally the ingredients for white sauce are put with an uncooked food and baked. When this is done, the food cooks and the milk, flour, and butter make a white sauce of their own. An example is escalloped potatoes.

A dish of macaroni or cooked rice may be combined with white sauce and enriched with minced ham, sausage meat, cheese, chicken livers. Or tomato may be used in place of milk in making the sauce.

The most famous of all creamed dishes is chicken à la king.

Lobster, shrimp, crab, hard-cooked eggs may be fixed à la king.

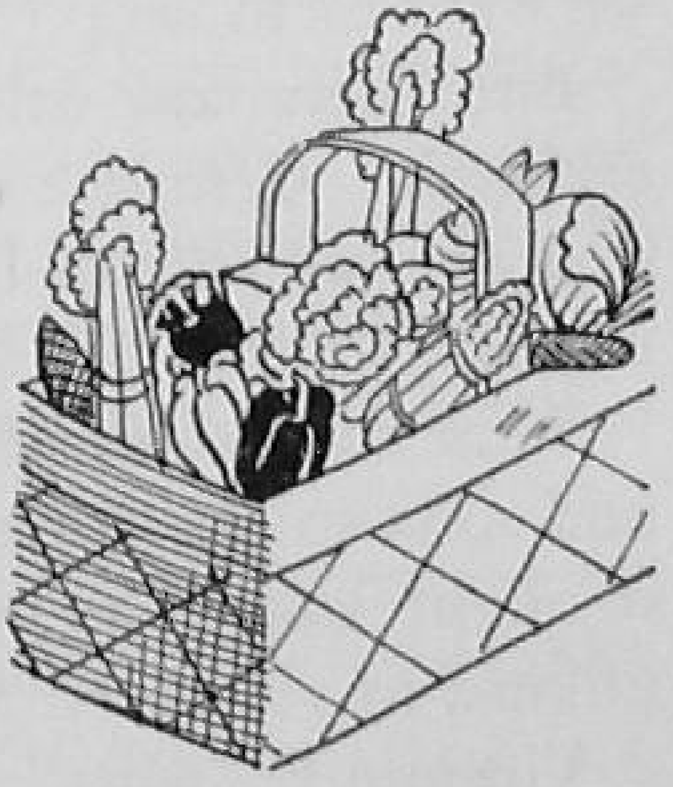
To a rich white sauce are added sautéed mushroom caps, cooked peas, minced green and red peppers. The diced fish or chicken is combined with this sauce. Just before serving, a teaspoon of lemon juice, one or two beaten egg yolks, and a suspicion of grated nutmeg are added.

Don't you suppose that this dish came into being something like this? A woman planned to have creamed chicken for her family. Then she heard that company was coming. So she dressed up her creamed chicken by adding the ingredients mentioned. Her guest tasted it and said, "My, but this is good. What do you call it?" The hostess said, rather deprecatingly, "Why, it's nothing but creamed chicken." "Creamed chicken!" ejaculated the guest, "well, if this is creamed chicken, it is fit for a king." And so chicken à la king came into being.

How about some bright student in the class making up a chicken à la queen?

Vegetables

How much respect have you for vegetables? Enough to consider their use for a centerpiece? Glossy purple eggplant, white and purple turnip, pale green cabbage, deeper green lettuce and cress, gleaming deep green pepper, scarlet tomatoes, pale yellow wax beans, deep ruby-red beets, ocher rutabagas, orange carrots, yellow plumed celery, snowy white cauliflower — think of the possibilities of these as a centerpiece on a dinner table. Nature has been lavish with her colors.



Why do you suppose we started a talk about vegetables with the idea of a centerpiece? If you say, "Because you are trying to make a contrast between the beauty of an uncooked and the sorry appearance of a cooked vegetable", your guess is correct.

Do vegetables have to be completely ruined as to looks in cooking? The answer is — No.

Cooked Vegetables. Vegetables have pigments or colorings which are affected by cooking, true enough, but with care some of the original beauty may be retained.

The green coloring is chlorophyll. It is slightly soluble in water, and in the presence of an alkaline solution becomes intensely green. In the presence of acid it turns yellow and brown. The same vegetable which contains chlorophyll contains its own acid. Too long cooking decomposes the vegetable, the acid is released and does the harm. Explain that statement in the light of cooked string beans and overcooked cabbage. Explain the alkaline reaction in the light of the practice of adding soda to peas and beans.

The yellow and orange vegetables, like carrots, squash, sweet potatoes, get that color from a substance called a carotinoid. It is insoluble in water and insensible to both alkali and acid. Does experience in cooking these vegetables bear out that statement?

Red cabbage, beets, and radish skins have their pigmentation because of the presence of anthocyanins. These are soluble in water, turn from blue to red in the presence of an acid. A purplish tinge is intensified when they are cooked in aluminum or tin. Put vinegar on cooked red cabbage. What happens?

Armed with these facts we know how to proceed to get the colors we want or to keep those which Nature gave the vegetables.

But there are other facts to be considered. Age toughens cellulose. Compare the keeping qualities of a fresh young carrot and one which has been dried in sand and prepared for winter storage.

Soda softens woody fiber. Therefore, it would seem wise to add soda to old vegetables or tough ones if we did not know that it might affect the color and if we had not learned that soda is unkind to vitamins.

Vitamin C "wilts" in the presence of soda or any alkaline solution.

However, we may believe that the addition of an exceedingly small amount, say one-sixteenth of a teaspoon of soda to a pound or two of vegetables, will make the color of the cooked vegetable so much more attractive that a person will eat twice as much and, therefore, get her quota of vitamin after all.

We have learned through experimentation that we overcooked

most vegetables in the days of old. Compare slippery, brown, strong-flavored and juiced cabbage with that which has been cooked according to modern practice. To-day's cooked cabbage is rather crunchy, fresh green in color. If the cabbage is young, it reaches that state within ten minutes after the water in which it is cooking starts to boil.

String beans are another vegetable which has suffered from too long cooking.

Besides shortening the time of cooking, we have changed the method. This has been done since we learned about the solubility of mineral salts in water and the tendency of Vitamin C to weaken under the strain of cooking.

Any method of cooking which keeps mineral salts within the vegetable is to be preferred. Baking is best, of course, but not all vegetables can be baked.

The best method of boiling green vegetables in water is still undiscovered. One school of thought advises six to eight times as much rapidly boiling water as vegetable, the other advises practically no water beyond that in the vegetable itself. When a large amount is used the saucepan is left uncovered. The liquid remaining after the vegetable is cooked is added to soup or used in making gravy. In this way the dissolved mineral salts are saved, and since the uncovered kettle does not confine the steam there is slight discoloration. In following the little or no-water plan cover the saucepan tightly to hold in moisture. The small amount of steam cooks but does not discolor the greens. By the time the vegetable is cooked the moisture has been absorbed.

Both schools agree that vegetables are done when there is still a slight crunchiness left in them.

Steaming is not recommended for green vegetables, except for spinach. Pressure cooking is not recommended for vegetables belonging to the cabbage or onion family.

Waterless cooking has had many advocates the past few years. Is there merit in it? If so, why? Is the term correctly used? Does it require a special utensil? If so, why? If not, why not?

Uncooked Vegetables. Since many unhappy changes occur in vegetable cookery, it is unfortunate that all vegetables cannot be eaten raw or in salads. When we take raw vegetables, we get crisp texture, vitamins, mineral salts, pleasing color, fresh flavor.

Try raw carrots grated or cut into match-like strips. Use raw spinach as a salad green. Recall the freshness of cole slaw. Radishes, scallions, celery tempt us to become uncooked-vegetable fans. Raw potatoes, rutabagas, sweet potatoes, eggplant, turn us back to prefer cooked vegetables. But even they have been overcooked in the past.

Let's make a new time-table for cooking vegetables.

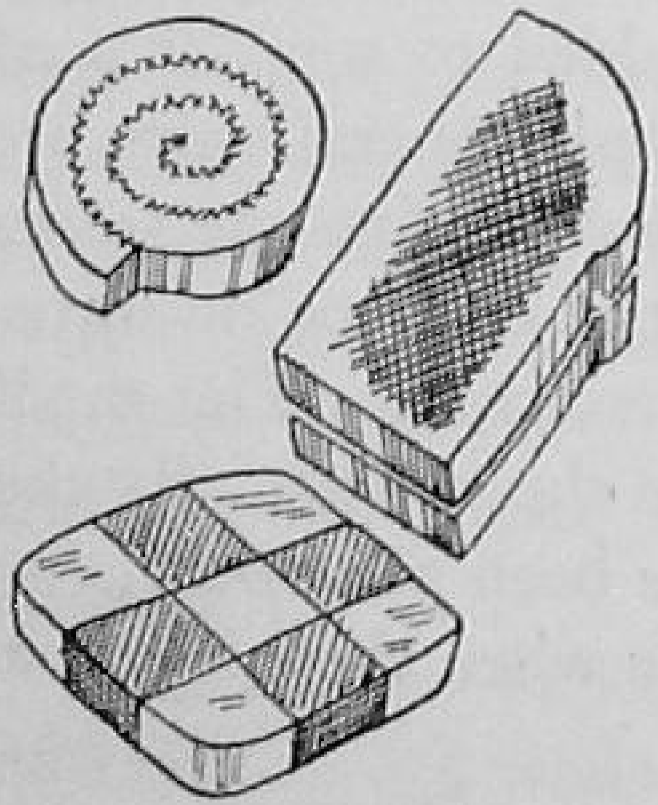
Many hotels, lunch rooms, and cafeterias serve vegetables improperly cooked.

Those flavorless, brackish, limp, discouraged foods are quite unlike our vegetable centerpiece. Truly vegetables must feel they have fallen on evil days.

They are so important in our group of "protective foods" that it is doubly unfortunate they so often appear at a disadvantage.

Sandwiches

Most sandwiches may be divided into three parts — a top, a bottom, and a filler. The top and bottom is a breadstuff of some kind. It may be slices of bread, it may be a bun, crackers, toast, two cookies, or a split lady finger.



The filling may be robust, as meat, sardines, or fried egg; it may be sharp, as cheese; it may be a relish, as chopped olives carried by mayonnaise; it may be raw vegetables in leaf, shredded, or chopped form, as cress, lettuce, or raw carrot; it may be sweet, as jam, jelly, preserves; it may be light, airy, as whipped cream into which has been folded fresh banana pulp, or preserved strawberries, or ground figs and dates. And it may be, sad to relate, all of these combined in one massive culinary mistake. There is a sandwich of seven tiers which starts with an olive filling. Between the next two layers is the fish. Then comes the meat, the salad, the sweet, the cream cheese, and last the candied ginger. A soda mint tablet or something similar ought to be added as the bottom or eighth layer.

On the other hand, there is a sandwich so simple it is nothing but thin bread and butter served with rolls of tender lettuce leaf or with a few sprigs of cress.

Apparently, anything which is surrounded on two sides by bread carries the name of sandwich.

There is almost as much variation in sizes as in fillings. A tea sandwich may be no larger and scarcely thicker than a silver dollar. And a sandwich for a hungry hiker, ditch digger, or the famous Maine lumberman may consist of two hunks of bread which barely can be held in the two hands.

But whether the sandwich be for a lady's tea or a hiker's picnic there are certain rules which, when followed, make the sandwich perfect.

First, the bread should not be dry on the outside. With paraffine paper, parchment paper, clean damp towels there is no excuse for the sandwich which curls at the edges, in scorn perchance of its looks.

Second, a sandwich should be easy to bite into with no trailing pieces of filling destroying the symmetry of the bite.

Third, a sandwich should not have a drippy messy filling which oozes out at unsuspected places at inopportune times.

Fourth, a sandwich should have the filling, especially the butter, if the slices are spread with that before the filling is laid on, extending to the very edges.

Fifth, if a filling like tomato is used, the bread should be well protected by butter so that the juicy and watery tomato does not make the bread into a soggy mass.

Sixth, the butter should have been creamed before being spread. Hard butter spread with an unyielding knife has a way of going right through the bread as if it were so much tissue paper.

Seventh, if a variety of sandwiches is offered, each kind should be cut in some distinctive fashion so that the person who detests cream cheese and olive does not get that one when he wanted a salmon salad one. Vary the angle of cutting.

Eighth, crusts need not be trimmed except for dainty tea sandwiches, but that does not mean that ragged or crooked slices are ever allowable.

Ninth, there should be a filling seasoned highly enough to add flavor to the bland breadstuff, which is, after all, but the carrier of unsuspected thrills for the appetite.

Tenth, no sandwich should be tied with ribbons. Neither should it be so fussy that it has the appearance of being beflounced, beruffled, and betucked. That effect is never desirable in food.

A fancy cutter, say a witch or an owl, a heart, a diamond, a lion, or a lamb may be used to shape sandwiches. But there the similarity should stop. Pimento should not be put on for the tongue, nor bits of olive for eyes, nor rough coats of cream cheese for wool. Food should be a picture but not lifelike representations of objects. Salads made to look like butterflies, cakes iced to represent a flag, cream cheese rolled into miniature golf balls may taste good, but nevertheless they are not in the best of taste.

A thin round of rye bread, cut about two inches in diameter, with well-flavored cream cheese roughly piled on top and half of an English walnut topping that, makes an attractive open sandwich — and a good one, too.

Many people like to make their own sandwiches at the table. For them we suggest a buffet arrangement.

Arrange slices of cold meats, wedges of cheese, and parsley on a plate. Have a bowl filled with crisp washed and drained lettuce, tomato slices, cucumber slices, slivers of green pepper, sprigs of cress. Arrange a relish dish consisting of cucumber pickles, stuffed olives, anchovies, chutney, prepared mustard, horseradish, salad dressing. Fill one plate with slices of white bread, another with slices of rye. Have two large pats of creamed butter on the table. Set the guests to work making their own sandwiches. A prize may be offered for the most artistic, the best combinations, the worst. A cook book for beginners is a good prize for the booby and a fairly recent book — the most complete compilation of sandwich recipes — one thousand and one of them [1] — for the first prize.

Milk

If only there were some new way of emphasizing the need for milk in your diet. You have heard so much about milk that many of you shut your ears when the word is mentioned. That's foolish.

[1] "1001 Sandwiches," Florence A. Cowles. Little, Brown and Company, 1936.

Milk shows up well in food analyses — it has water, mineral salts, vitamins, protein, fat, carbohydrate.

Experiments with white rats in your science classes show you what lack of milk does to an animal.

Milk appears in the food prepared for prize calves, pigs, chickens.

Milk is inexpensive. Milk is a protection against many diseases. Milk helps prevent rickets, bow legs, decaying teeth. Milk is both food and drink. The milk protein is a complete one. Milk is alkaline in reaction.

Milk is a "protective food." This means it protects health and aids normal growth. Our daily diet tends to include too many starches and fats and not enough green and leafy vegetables and milk. Where sugar was almost totally lacking it might become necessary to add sugar to the diet to protect the health of the people. In that case sugar would be a "protective" food. But for us milk, leafy green and yellow vegetables, dark grains, are what we need. The greatest of these, because of the diversity of nutrients found in it, is milk.

If milk is all those things, is there anything it is not? Yes, it is not a complete food for any person over a year old. It is so diluted that too great an amount is required to meet all the body needs. Also, it lacks cellulose.

It is not a food which adds pounds to one's weight.

It is not a food which keeps easily, unless it be evaporated or condensed and canned. A few years ago canned milks were not as highly considered as they are now. Research in chemical laboratories has shown they do contain vitamins and that the curd is easily digested. They have a definite place on the emergency shelf, in the dietary of the family living on the low food budget. They have been found popular and successful in the making of ice creams in the iceless box.

Milk is easily contaminated. It may be ruined in cooking. It takes on foreign flavors with great ease.

But even so, there is no food we have which can take the place of milk. Most textbooks on food devote pages to the discussion of the value of milk. We have tried to impress you by the brevity of the discussion and the absolute seriousness of every statement made.

Living in a modern age in a modern country you need milk in your diet more surely than your ancestors ever did.

One quart of milk a day is what you ought to have. One pint of milk a day will see you through — but give you only a small margin of health insurance.

The protein of milk is a complete one. The reaction of milk is alkaline.

Milk has so many things in its favor. Why, then, don't more girls drink it? First, because they think it makes them fat. How can a substance which is 87 per cent water do that?

Second, because they think it is sophisticated or smart to turn up their noses and say they "don't like milk" or they "can't drink milk." Every one of us goes through a period of being silly and illogical. If girls won't drink milk, how do they know they *can't* drink it?

Third, because they don't like the flavor. Possibly they have had a glass of tainted milk — it gets that way easily — but that does not mean every glass is displeasing. One poor ice cream sundae does not cure them of going back and ordering another. The flavor of one piece of candy which displeases does not make them "off" candy for the rest of their lives.

Ways of Using Milk. As a beverage — plain; with coffee or coffee substitute; in cocoa or chocolate; in eggnogs; as buttermilk or malted milk.

On foods — cereals or desserts.

In foods — cereals; doughs (as in milk bread or biscuits); escalloped dishes; croquettes.

In sauces — cream sauce for vegetables; thin custard sauce for desserts.

In soups — cream soups; chowder; oyster stew.

In desserts — puddings; custards; ice creams.

Milk is the cheapest single food because it furnishes more food essentials than any other one food for the same amount of money.

Milk should be the foundation of the diet. One quart of milk furnishes more than half of the day's essential food needs for adults. It furnishes even a larger portion of the child's needs.

Cheese

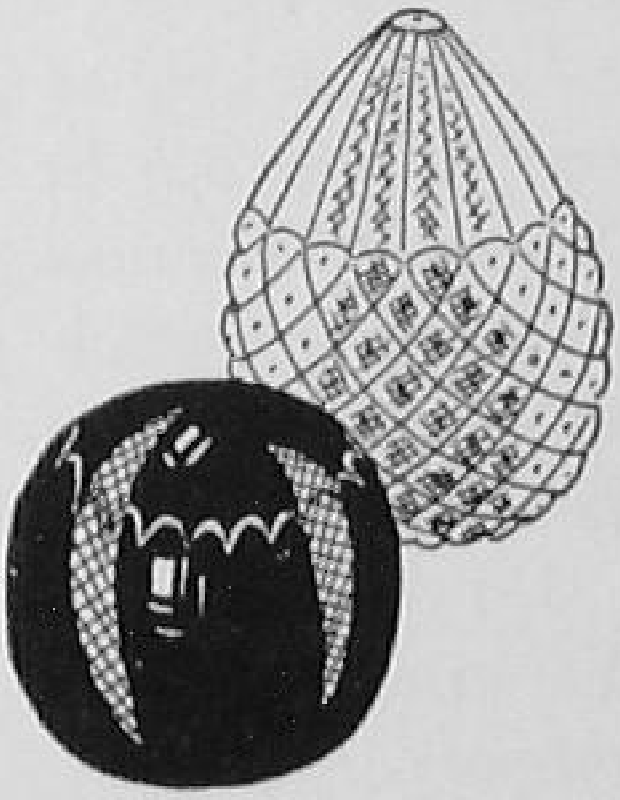
How many cheeses can you name? There is York State, sometimes known as store and sometimes as rat cheese; cream cheese;

cottage or pot cheese; Swiss — and that's about all — oh no, there is that cheese you never have tasted, but there are numberless jokes about it — Limburger cheese.

Some years ago one of the authors of this book was detained in a small village. She hunted for a place to eat and finally found a little shop. In she went and sat down at a funny old-fashioned marble-top center table. A little bustling woman came to take the order. She said she could make up a sandwich. When asked what kind, she said ham and egg and fermented cheese. It took some time for it to dawn upon her guest that she was referring to pimento cheese. It was not a new kind, after all.

Now that you have listed the cheeses you know, suppose you listen to some other names:

Cheddar and Stilton from England; Roquefort, Brie, Camembert from France; Gorgonzola, Parmesan, Bel Paese from Italy; Sap Sago, Emmenthaler, Gruyère from Switzerland; Edam, Pineapple, Gouda from Holland; Leiden, spiced, from Norway; La Trappe from Canada. This list does not include any of the special cheeses now made in America and marketed under trade names.



Americans are lamentably lacking in knowledge of cheeses. It's our loss — for they add a sophistication, a finish to meals. Of course, if we think only of a hunk of cheese that is eaten with a piece of apple pie or a slice of it put between two slices of bread, we are looking on cheese as something to eat and not something to savor and to enjoy.

Want to hear a story about a cheese? Once upon a time there was a shepherd lad who started out one morning to tend his flock. He took with him his lunch of bread and cheese. Something happened that day — either wolves disturbed his flock, or robbers came, or some other calamity befell him, for he never had time to eat his lunch which he had hidden in a near-by cave. He went home and forgot all about his cache.

Months later, so the story goes, believe it or not as you see fit, he was in the same field. He had forgotten his lunch. At noon

he was famished. Memory began to work and he said, "Let me see, let me see. Did n't I tuck a piece of bread away under a stone in that cave over there?" He hunted until he found the stone. He lifted it and there was his forgotten lunch. He tasted it and after tasting he ran home and said, "Mother, Mother, taste what I have here." His mother tasted and called the father. The father tasted and called the neighbors. And to this day they make cheese in that part of France by taking goat's milk cheese and bread, letting it mold in the cave close by, and then putting that crumbled mold into fresh cheese where it grows and grows into lovely blue-green penciling of mold that is characteristic of Roquefort cheese.

It's a good story, but not half so good as the cheese. Try it some day. Try the other cheeses, too. Eat them with salty crackers. Some day, when Mother lets you, serve many kinds of cheese for dessert and let each guest take what he will. That's a Vogue-ish kind of ending for a meal. Get the booklets of cheese recipes sent out by the nationally advertised cheese companies. You will find unexpected pleasures in these dishes. Try that cheese cake which uses zwieback crumbs for crust. Try the salad sandwich loaf. Use cream cheese with crackers, raspberry jam, or ginger chips.

Do you wonder why and how there are so many kinds of cheese? Variations in texture and flavor are due to variety of milk used, proportion of butter fat or cream left in the milk or added to it, the methods used in separating, preparing, seasoning, handling the curd. Bacteria of some kind are usually present. They give characteristic flavor.

Bacteria or molds, or both, affect flavor, texture, and appearance. What would growing organisms like yeasts or bacteria do to the texture of curd? Remember, they give off gases as they grow.

Try melted cheese on a whole head of cauliflower boiled and then put into a casserole with white sauce, cheese and butter and paprika and baked until it bubbles.

Try grated cheese on soups, grated cheese in the crust of apple pie, cheese dreams which are, alas, all too frequently cheese nightmares.

Experiment with the cheese zoo. There is Welsh rabbit first and foremost. Then there is a blushing bunny, made to blush

with tomato. There is English monkey, which monkeys around with a Welsh rabbit until it turns into something digestible.

Remember that cheese is a protein and as such needs special care in cooking. With the modern American methods of treating cheese it is possible to get a kind that melts and does not string.

And remember that people who say cheese disagrees with them are usually the ones who forget it has food value. They treat it as an extra or condiment — eat it after they have already had a full meal. Then they wonder why they can't sleep, or feel uncomfortable. Of course they feel that way.

It's about time for us to introduce "gourmand" and "gourmet." One person is to be commended and the other to be scorned. Look up the words in the dictionary. Keep them to spring on your family. One will often apply to that always hungry and ever-eating brother, and the other — well, the other applies to you when you taste a bit of rare cheese and exclaim with pleasure and satisfaction over its piquancy and flavor.

If you have a chance, go through a modern cheese factory.

Salads

Salads are nothing new. The Bible records that Nebuchadnezzar was the first salad devotee, for "he ate of the grass of the field like the oxen."

Salads have never been as popular as they are to-day, nor have as many combinations of food been put together and served on a lettuce leaf and called salad.

Webster defines a salad as "a preparation of herbs, vegetables or fruit as lettuce, celery, watercress, usually dressed with salt, vinegar, oil and pepper."

Nothing is said there of a dressing of pineapple juice thickened with cornstarch and lightened with whipped cream; nor is any mention made of a mixture like cabbage and marshmallows. One might almost paraphrase the famous saying with "Oh! salads, what crimes are committed in thy name."

A perfect salad uses crisp green vegetables. It has a dressing which is piquant in flavor, rather sharp but mellowed by the oil or other fat which smooths and blends the salad greens with the highly seasoned condiments put into the dressing.

Now for what it is *not:* It is not icy cold but of a temperature which will keep the greens crisp. It does not have a watery mixture at the bottom of the salad, proof that the greens were washed but not well drained. It is not cloyingly sweet. It is not a mixture that belongs in the dessert class but earns its name of salad only by virtue of being placed on a limp and discouraged lettuce leaf.

A dinner salad is supposed to represent an interlude (often a strange one!) between the full-bodied meat course and the sweet dessert. A luncheon or supper salad may serve as the main part of the meal. In that case it should be fairly substantial.

In certain parts of the country the salad is the first course of the dinner. Unless such a salad be light, it blunts the appetite for the main course which follows.

The belief has gone abroad that men dislike salads. That is slandering both the men and the salad. Give a man or a boy a crisp green which is not too hard to manipulate, which does not drip a watery dressing but carries a mellow yet exciting flavor, and he will send back his plate for more.

Women keep telling men they should "eat salads because they are good for them." Goaded, finally the man takes head lettuce and dresses it liberally with Thousand Island dressing, eats it, and says, "I hope you are satisfied."

The fact that he chooses that flavorful dressing ought to have shown women what a man wants in a salad. No sweet gooey whipped-cream mixture on his greens, thank you. All of which goes to prove that men really have sense in culinary matters.

The simplest salad of all is the well-washed lettuce shaken free from all drops of water, "fatigued" with an acid and oil mixture until each and every leaf carries its coating of glistening dressing. If the whole head of lettuce is cut into quarters or eighths and left in wedge-like shapes, it is impossible to get the dressing on each leaf. Separate the leaves from their central core, break away some of that resisting backbone of the leaf, wash the leaves well, put in a mesh bag or in a clean towel, and twirl in an out-of-door space for a minute or two. Put the lettuce into the refrigerator to crisp. At serving time put in a bowl, pour dressing over, and toss leaves back and forth, using a salad spoon and fork. Serve.

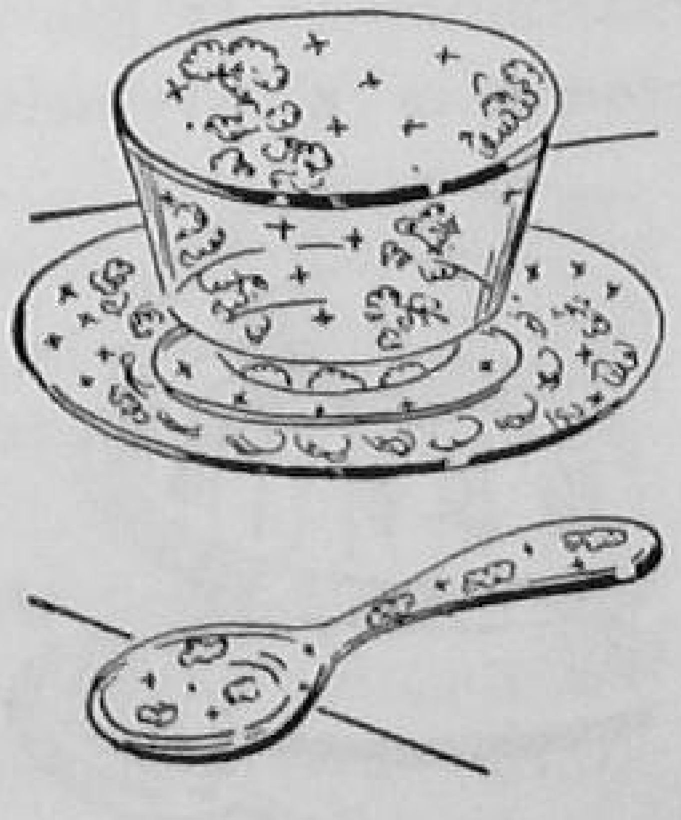
Watercress, curly endive, young spinach leaves, escarole, finocchio, fennel are other greens which may be treated in the same way.

French Dressing. The ideal dressing for these greens is a mixture of oil and lemon juice (or lemon juice and vinegar) seasoned with salt, pepper, a few grains of sugar, a suspicion of onion or garlic. Roquefort cheese may be mashed and added to the oil-acid combination. Mashed anchovies or anchovy essence, chopped chives or parsley, green pepper are other additions used to vary the appearance and flavor of the French dressing.

But remember that the French people, after whom this dressing is named, know the virtue of simplicity and of stopping soon enough. A French dressmaker does not add ruffle on ruffle, tuck on tuck, trimming on trimming. Rather she gets her effect with one ruffle or tuck placed to best advantage.

Many people have a prejudice against oil in dressing. That is because a first or early experience presented a dressing with an oil which was rancid, or with too much oil for the acid, or one in which the oil stood in glistening globules on the watery liquid which had settled at the bottom of the salad plate.

The proportion of three parts oil to one of acid is good. Vinegar, even a small amount of it, adds a certain dash which lemon juice used as the only acid lacks. Some invalids cannot take vinegar. For them the lemon juice is the acid to use.



Mayonnaise Dressing. There are times, at luncheons or suppers, especially when the salad is the main dish, that a need is felt for more food value than would be obtained by the use of French dressing on greens. For such occasions we have mayonnaise dressing. Mayonnaise is a fairly stable emulsion of oil held in suspension. French dressing is a temporary emulsion and separates into its component parts on standing. A good mayonnaise retains its body and creamy appearance, even after standing for hours or days. Mayonnaise, like its simple cousin, the French dressing, is regarded with aversion by some people. They say they can't stand the oil. But mayonnaise may be the

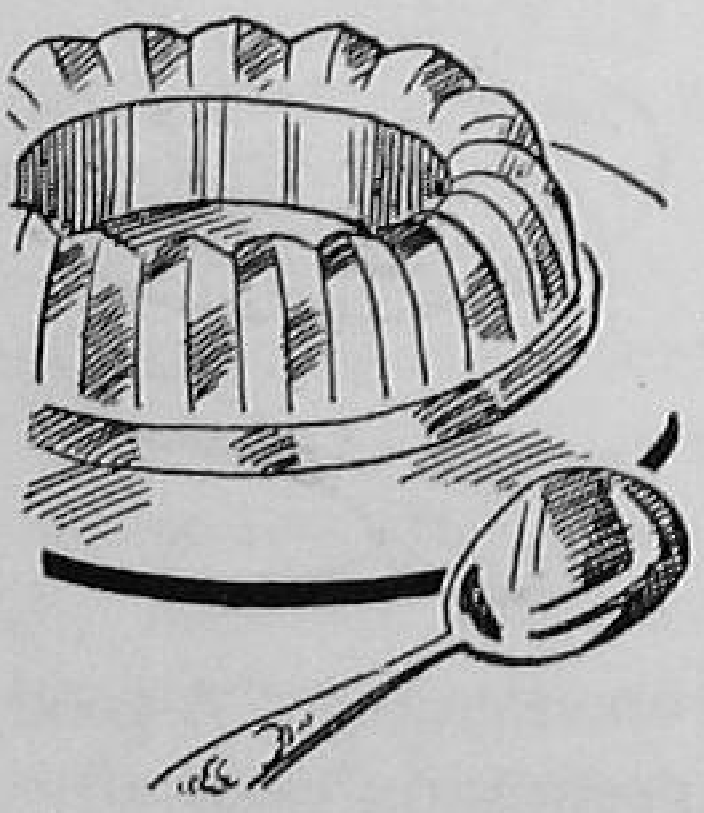
smoothest, happiest blending of flavors, sharp and sour and smooth, that palate may desire.

Mayonnaise should not be sweet. A small amount of sugar is put in to mellow flavors, not to lend sweetness.

Mayonnaise is good on chicken salad, fresh tomato, lobster, shrimp, potato salad. In the last-named dish the potatoes while hot should have been marinated with French dressing or partially dressed with a cooked dressing. The mealiness of the potato is seasoned by this means. The mayonnaise smooths and tops the combination.

Cooked Salad Dressing. A dressing which many people enjoy more than they do mayonnaise or French dressing is the one to which they became accustomed in childhood. They ate it on cabbage slaw. It consists of a "boiled" custard, in reality, using vinegar in place of milk, mustard in place of nutmeg, adding butter and pepper and salt. There are many variations of this recipe, but the principle remains the same. Butter is added to give smoothness to the dressing which goes over the rather crude and raw vegetable. Some milk may take the place of the water used to dilute the vinegar. Whipped cream may be added to lighten the dressing.

Cooked salad dressing is good on cabbage, potatoes, grated raw carrots, banana and peanut combination. It lacks the suavity of mayonnaise. It has its points, of course, but at its worst it resembles a wry-mouthed, sharp-tongued woman whom the "movies" like to portray as their type-idea of a disappointed spinster.



Desserts

The childish rhyme which goes, "First the worst, second the same, last the best of all the game," is accepted by the multitude of people who think dessert is the best part of the meal.

But dessert includes so many types of dishes that there is room for argument even there.

A group of women attending a night school cookery class had "such a good time" in a six weeks' course of dessert making!

The first lesson dealt with varieties of desserts for the growing child: junket, custard, floating island, Spanish cream, rice pudding, bread pudding, plain gelatin. The women noticed most of these desserts were rich in milk, rather bland in flavor.

The next meeting was devoted to making desserts that a boy with a hollow leg likes. That saying "hollow leg" has come to express the prodigious amount of food that a growing boy needs. There were apple dumplings, bread puddings, apple pan dowdy, Norwegian prune pudding, strawberry shortcake, fudge cake. There were calories galore in these dishes, and much bulk. They stuck by a fellow's ribs when he went out to play baseball or hockey!

For the girls with the "fluffy ruffle" appetites (recognize the description?) there were fruit gelatins with whipped cream, charlotte russes, queen of puddings, ice cream with chocolate sauce, rice dainty, jelly roll, grapefruit, fruit cup, chiffon pie, prune whip.

There was but little discussion as to what dad's night would offer. Of course there was pie, also mincemeat turnovers, Banbury tarts, steamed pudding with hard sauce, upside down cake.

Mother's dessert was the kind she ordered when she ate down town: chocolate éclairs, whipped-cream puffs, Bavarian cream, French pastry, Danish pastry, peach ice cream, ice-box pudding.

For grandmother there was baked Indian pudding, sailor's duff, creamy rice pudding, pan dowdy, blackberry grunt, blueberry dumplings, blueberry slump, gooseberry fool, trifle, apple tapioca, apple Brown Betty, cheese cake.

In that classification you have desserts that are simple, desserts that are sophisticated, desserts that have eye appeal, desserts that have robustiousness, and desserts that spread all over the plate and look like a lot of food.

And that, in truth, gives us a classification for just about every kind of dessert there is. But such classifications are not found in the usual cook book, so suppose we think of desserts under the more usual headings — milk desserts, egg and milk mixtures, fruit desserts, puddings, pastries, cakes.

Desserts Using Milk as a Base. A simple one is junket, or rennet custard, consisting of milk, sugar, flavoring, and rennet. Rennet contains an enzyme, called rennin, which is found in the

inner lining of the stomachs of calves and lambs. It is also found in the human stomach. It possesses the property of coagulating milk when the temperature of the milk is lukewarm. After the rennet has been added to the sweetened and flavored lukewarm milk, the mixture is stirred, just enough to mix it thoroughly, allowed to stand in room temperature until the milk is "set", and then, with as little disturbance as possible, put into a cool place to chill. The English used to call it "slip and go down" because it was so smooth, so cooling, and so easily eaten. You will find references to it in English poetry of the seventeenth century.

Nowadays we may purchase a sweetened flavored powder called junket powder which contains rennet and which, when added to lukewarm milk, gives us a raspberry, a chocolate, or a vanilla flavor according to the package we choose.

Junket is good with fresh fruits served with it, or with a whipped cream topping to which ground figs and preserved ginger have been added.

Blancmange. Here we have milk which is sweetened and thickened, but not with rennin. Cornstarch has been used. Adding chocolate makes the dish into a popular dessert with the misleading name of chocolate blancmange. Ask the French teacher why that name is inconsistent.

Blancmanges may be molded. They should not be as stiff as a starched shirt front. Fresh fruits, boiled custards, unbeaten or smooth cream is usually served with these desserts. Spanish cream is molded blancmange which has been made light and airy by the addition of fluffy egg whites beaten in while the blancmange is still hot. Then a thin yellow custard sauce, poured over it, gives the contrast of yellow with snowy blancmange.

Add melted chocolate and cooked prunes to one third of a blancmange. Add egg yolks to a second third. Keep the last third white. Combine in layers and say "*Voilà* — Neapolitan pudding!"

Milk and Egg Desserts. Eggs thicken milk in the presence of heat. Custard making is based on that principle.

If we cook the mixture in the upper part of a double boiler with hot water underneath, we get what is called a "soft" or "boiled" custard. Perhaps a better name is "cooked custard."

If we put the mixture in a baking dish, set the baking dish in a pan of water, and set the whole thing in the oven, we get a "baked" custard.

In both cases, you see, we use a water bath. That is because the temperature needs to be kept below 212° F. This is necessary since egg coagulates at 158° F.

Boiled custard is "done" when the mixture coats the spoon. Baked custard is "done" when a clean silver knife blade inserted into the center of the custard comes out as shining clean as it went in.

A curdled or overcooked boiled custard may be made fairly smooth, but less thick than it would have been had the mishap not occurred, if the custard is beaten immediately with a rotary eggbeater.

A curdled or watery baked custard cannot be repaired in any fashion.

Nutmeg is the usual flavoring for a baked custard and vanilla for a boiled one. Almond is a happy choice occasionally.

To make a baked caramel custard it is necessary to prepare a heavy caramel liquid, pour a small amount in the bottom of the custard dish, add the liquid custard mixture carefully, and bake in the usual fashion. At serving time the custard is unmolded, when the caramel sauce runs down the sides of the custard in careless picturesque fashion.

Such a dessert is fine for a luncheon or dinner in which yellow and brown have composed the color scheme, perhaps with Black-Eyed Susans or yellow and white daisies for centerpieces.

A boiled custard may be used as a yellow sea on which to float white islands of poached, sweetened, beaten egg white. A bit of jelly added to the whites gives pink islands — coral reefs, perhaps.

Desserts Using Milk, Eggs, and Another Binder. Sometimes we are "short" on eggs and "long" on rice, bread, or tapioca. Then we make a bread or a rice or a tapioca pudding in which much of the thickening is done by the starchy material. An egg or two may go in, but more for color and for flavor than for needed coagulating power.

This fact is proven by the frequent use of the egg white as a meringue or as a fluffiness beaten in at the last moment.

Rice Pudding. A creamy rice pudding which was made in the days of grandmother is a most economical one. It uses only milk, rice, sugar, and flavoring.

The creamy appearance and rich flavor comes from the long, slow cooking and the frequent spooning "in and under" of the top of the pudding. As the milk cooks for a long time in the oven it loses water and begins to resemble an evaporated milk in color and flavor.

Rice custard pudding calls for the use of cooked rice which is folded into the egg, sugar, and milk mixture. If this pudding were cooked as long as the creamy one, the eggs would have been curdled from overcooking. Raisins are frequently added to this pudding. Melted chocolate may be added as well.

Bread Pudding. Bread pudding is considered "boarding house" fare. It need not be, for the dish may be dressed up in all sorts of ways.

Melted chocolate or cocoa dissolved in a small amount of hot water may be added to the milk. It is wise to heat the milk when adding chocolate lest it congeal into small bits which do not melt during the cooking.

Caramel may be added for part of the sweetness in another bread pudding. Ground figs, chopped candied fruit peels, coconut may be added for flavor. Currants, raisins may be added to the plain bread pudding.

A plain pudding may be baked and when taken from the oven, spread with a layer of jam. A meringue topping goes on this. The pudding goes back into the oven to brown the meringue and comes to the table as "Queen of Puddings."

Tapioca Pudding. Years ago it was impossible to get tapioca in any form but that of small balls. Made of starch, as they were, the tendency in cooking was to soften the outside, making it translucent but leaving the inner part chalky white and raw. Even long cooking did not correct that.

Tapioca pudding appeared frequently at college dinners. Boys called it "Fish-Eye" pudding. Girls referred to it as "Freshman's Tears." Both names are easily understood. So is the dislike they had for the pudding.

But nowadays the tapioca is precooked in the factory, desic-

cated and crushed so that it comes to us in a granular form, ready to serve after a few minutes' cooking.

This granulated tapioca is delicious in creamy puddings made rich with eggs, sugar, and milk.

It may be cooked in water and then combined with fruits, such as fresh apples, dried apricots. This mixture is baked and served with cream.

Tapioca cream may have egg whites beaten in or served as small white islands, as suggested earlier in floating island.

Desserts Using Fruit. Imagine a hot summer day — imagine a glass dish filled with sliced peaches showing red crinkled edges where the peach stone has been embedded contrasting with juicy white pulp. Imagine plenty of rich cream in a hobnail glass pitcher and then add a plate of scalloped-edge, sugar-besprinkled cookies. Can you think of a better dessert? Not unless you see strawberries in the same environment. An impious Scot once said, "Dootless the good Lord could hae made a better berry, but dootless He never did." Strawberries *are* good.

Or possibly you see long wedges of juicy watermelon, or a dish of cantaloupe, honeydew, and watermelon balls with a blackberry or two at one side for accent.

No matter how you look at it — there is n't anything much prettier or more appetizing than fresh fruit for dessert. Why women are so foolish as to think that fresh fruit in season is not the dessert par excellence will always remain a mystery. Perhaps your generation will have sense.

A ring of lemon ice with fresh figs piled in the center, or fresh pineapple, or deep dark red cherries pitted, sweetened, and chilled is a dessert which uses fresh fruit in an imaginative way.

Pass a pale pink sauce with those combinations and the guests may well quote Swift, "Fate cannot harm me, I have dined to-day."

Sauces. Sometimes fruits need cooking "to save" them. Then you have a fruit sauce as satin smooth as strained apple sauce or as individually bumpy as stewed blackberries. These fruit sauces should not be heavy and rich as preserves. They need attractive dishes to set them off and cake or cookies to be eaten with them.

Try hot apple sauce with warm gingerbread as a dessert. Or put peeled, cored apple quarters in the bottom of the tin before

you pour the gingerbread batter in, and then when it is baked and dished, you have apple sauce and gingerbread all together.

Other things may be done with sauces. They may be put in the bottom of custard cups or baking dishes, with a baking-powder batter poured over them. Then they are steamed or baked and served as slumps, grunts, bird's nests, and dumplings.

The English use a suet dough, put fresh sweetened fruits in it, wrap it around them as a blanket, put the pudding in a stout floured pudding bag or a mold, and steam the pudding until the crust is cooked and the berries are lost in their own juices.

There is the upside down cake or the "brown stone front" dessert that has proved popular. This calls for fruit, usually canned or dried, which has been cooked and drained. It is sautéed lightly in butter, covered with a sweetened batter, and baked in the oven. If a baking-powder crust had been put on, and the mixture had been baked in a baking dish, the result would have been fruit pudding. If the crust had been pastry with the fruit underneath, and the mixture baked in a baking dish somewhat deeper than a pie plate, the result would have been known as pan dowdy.

Then there are shortcakes. Do you suppose that name was given them because no matter how much is made the supply is always short of the demand?

Sliced oranges, fresh strawberries, fresh sliced peaches, apple sauce, or cooked apricots are piled on and between rich, freshly baked biscuit which have been split and buttered, and you have a shortcake.

Fruit Gelatins. A lemon gelatin well flavored to which red raspberries have been added when the gelatin was partially set is delicious when eaten with plenty of smooth cream. Many others are listed in the discussion of gelatin desserts.

CLASS ACTIVITIES

1. Plan a series of supper or luncheon menus, using such combinations of food as:

   a. Cream soup, sandwich, simple fruit dessert

   b. Vegetable plate luncheon, bread, beverage, dessert

   c. Cheese dish, vegetable salad, bread, gelatin dessert

d. Meat or fish salad, hot Parker House rolls, dessert

e. Croquettes, green vegetable, fruit salad, bread, dessert

2. Check from your list of foods required for the day those included in your menus. This will help you decide on the foods which should be included in the other two meals of the day for yourself or for your family. Plan menus for the breakfast and dinner which might be used with each of these luncheon menus.

3. Decide which of these menus you would like to serve first. Make a study of the foods you are to include in your meal, finding recipes and methods of preparation of each dish to be prepared; for example, before preparing luncheon *a*, learn all you can about cream soups and sandwiches. Make a detailed plan for your work as you did when you were serving breakfasts. (Plan to serve two luncheons of each type so that each two girls will have the experience of preparing and serving a meal of this kind.)

4. Try a different procedure for luncheon *b*. Each two girls might prepare a different vegetable. From these vegetables many varieties of plate lunches may be served. Be sure to consider flavor, color, and texture in your combination.

5. Before serving menus *c*, *d*, and *e*, make a study of salads and their preparation. Each of these menus includes a different salad. Each group might plan to demonstrate the preparation of one kind.

6. Compare each of your luncheons with the others you have served:

a. Were you able to follow your time schedule more successfully? Why or why not?

b. Did you find the preparation and serving easier due to your former experience?

c. Could you prepare this meal at home in the same or less amount of time? (Try it some night for supper.)

7. Make a list of food dishes suitable for a school lunch, noting cost, special value in the diet, amount of time needed for their preparation.

8. Plan a packed lunch for a high school girl; a high school boy; a younger brother or sister. Plan a picnic lunch for a party of six.

9. If you carry your lunch, prepare one dish for your packed lunch. Do this several times a week.

TEST: Standards in Foods for Luncheons and Suppers

Directions: In the following statements some of the items complete the statement correctly and some do not. Choose those which seem to complete the statement correctly. List these correct answers on a sheet of paper.

1. Fruit salad should
   a. Be placed on a bed of clean, crisp lettuce
   b. Have the fruit cut in very fine pieces
   c. Be chilled before serving
   d. Not be watery
   e. Not contain discolored fruits
2. A cream soup should be
   a. Of a smooth creamy consistency
   b. Lacking in any color
   c. Served hot in a heated dish
   d. Insipid in flavor
   e. Have a delicate flavor
3. Baked potatoes should
   a. Be fluffy and mealy
   b. Be soft and soggy
   c. Have a very brown crust
   d. Have a delicate flavor
4. A custard should
   a. Be delicately browned
   b. Be watery
   c. Be very sweet
   d. Be of tender jelly-like consistency
   e. Be delicate in flavor
5. Macaroni and cheese should
   a. Have a starchy flavor
   b. Have a smooth sauce, with cheese well blended
   c. Have an evenly browned crust of crumbs
   d. Have very little cheese added to the sauce
6. Cooked salad dressing should
   a. Be curdled and watery
   b. Be slightly sweet
   c. Be yellow and thick
   d. Be smooth and slightly tart

7. Cooked cabbage should
   a. Be pale green or white
   b. Be darker than its natural color
   c. Be very soft, pulpy, and shapeless
   d. Be tender
   e. Have a strong flavor and odor
   f. Have a delicate flavor, little odor

TEST: Your Ability to Judge Luncheon Menus

Directions: On a sheet of paper make an outline like the one given below. Read the menus which have been planned for December luncheons. Use the factors as listed under *A* and *B* to judge the menus. Under column 1 on your paper write the numbers of the menus, using Roman numerals. Under columns 2 and 3 list the numbers representing the good and poor factors of each menu.

FACTORS CHARACTERIZING MENU

1. MENU	2. GOOD FACTORS	3. POOR FACTORS

A. Factors that may characterize a good menu
1. Variety in texture and flavor is present
2. Color has been considered
3. Temperatures of foods are varied
4. All of the food nutrients are present
5. The meal may be easily prepared
6. The cost is reasonable
7. The foods are in season

B. Factors that may characterize a poor menu
8. Too expensive
9. Foods are not in season
10. Little variety in shape and color
11. Too many calories in one meal
12. Lack of some food nutrients
13. Too many starchy foods in the meal
14. Too much time required for meal preparation
15. No variation in temperature of foods

MENU I

Cream of tomato soup
Toast sticks
Egg sandwich
Canned pears
Cookies
Cocoa

MENU II

Buttered parsnips Mashed potatoes
Gravy
Bread Butter
Angel food cake Ice cream
Milk

MENU III

French fried potatoes
Buttered green beans
Escalloped cabbage with cheese
Apple and celery salad
Blueberry muffins Butter
Milk

MENU IV

Potato salad Cold baked beans
Peanut butter sandwiches
Bananas
Iced tea

MENU V

Macaroni and cheese Cole slaw
Whole wheat bread Butter
Prune whip Custard sauce
Hot chocolate

TEST: Application of Principles Involved in the Preparation of Foods for Suppers or Luncheons

Directions: On the right-hand side of the page are listed alphabetically some foods which you might prepare for supper or luncheon. On the left-hand side are some principles of food preparation which you apply in the preparation of supper and luncheon foods. Write on a sheet of paper letters *a* to *t*, representing the foods to be prepared. After reading the name of the food in the right-hand list, select from the list of principles in the left-hand list the principle which applies in preparing this food. Place the number of this principle in the space to the left of the letter representing this food on your paper. Thus 1 and 4 are applied in the cooking of cauliflower, so those numbers are placed in the blank thus: 1, 4 *f*.

PRINCIPLES

1. Undesirable flavors may be developed in certain vegetables by too long cooking or cooking in a small quantity of water
2. The coloring matter of green vegetables is very rapidly destroyed by cooking conditions. Heat and acid affect it, particularly with a small amount of water in a covered vessel
3. Acid favors color retention in raw red vegetables; alkalies and certain metals cause undesirable changes
4. White vegetables darken if overcooked because of the caramelization of sugar or the formation of undesirable chemical compounds
5. The presence of much tannin produces a bitter product
6. Casein is toughened when subjected to a high temperature
7. Albumin is coagulated by heat, so may be used for holding substances together
8. High temperatures separate and decompose fat
9. Gelatin dissolves in boiling water, then thickens when cold
10. Gluten has a great expansive power when mixed with water
11. Carbon dioxide is produced through the growth of yeast; it is used as a leavening agent
12. An emulsion is formed when tiny droplets of one liquid are held suspended in another liquid
13. Fat is used to separate starch grains, thus preventing lumping
14. Cold milk is added to starch before it is mixed with hot liquid to prevent lumping
15. Carotin (the coloring contained in yellow vegetables) is insoluble in water and unchanged by heat
16. If soda is added, use only a small quantity, so that vitamins are not destroyed

FOODS

a. Asparagus
b. Beets
c. Bread
d. Red cabbage
e. Carrots
f. Cauliflower
g. Chocolate cornstarch pudding
h. Crcquettes
i. Lemon jelly
j. Macaroni and cheese
k. Mayonnaise dressing
l. Onions
m. Parsnips
n. Peas, green
o. Potatoes, French fried
p. Spinach
q. Tea
r. Cream of tomato soup
s. Welsh rarebit
t. White sauce

UNIT 4. DINNERS

Planning the dinner for a family in which there are growing children is a problem. Let's see how many reasons we can advance for that statement.

First, father usually gets his noon-day meal near his place of business. His lunch at noon may be light — crackers and milk with or without a piece of pie — or it may be heavy and include meat, two vegetables, and a dessert.

Some of the children get a lunch at a school cafeteria or carry a lunch box. If the lunch is carried, there is apt to be at least one meat sandwich and a sweet, like a turnover or a piece of cake.

If the lunch is eaten in the school cafeteria, the tray may carry a dish of mashed potatoes, a meat dish or meat substitute, a dessert.

In this family which we are considering there is a younger child who had his heavy meal at noon.

Mother may have eaten nothing but a salad, some toast, and tea for her noon-day meal.

No individual over five is adequately fed who does not have in the day's meals at least a pint of milk, two leafy vegetables, one cooked and one raw, some fruit, protein in the shape of meat, eggs, fish, or cheese, some sweet, some fat, and plenty of water.

If meat has appeared in father's lunch and in that of the high school girl, then that food item should not be repeated in another meal. But mother needs some, and the pre-school child needs some protein — possibly egg.

If father had a simple lunch of a salad, or sandwich and a dessert, he needs a hearty meal at night. But the pre-school child should have had his heavy meal at noon. Any way you plan you find complications.

The ideal arrangement is the one where the whole family has the heavy meal at the family dinner table at noon. But modern life prevents that.

Most of us are staying up later in the evening than our ancestors

did, so it is feasible to put a heavy meal toward the end of the day. What a wise planner must do is threefold — consider the food requirements of the members of her family, consider how many have been met by the other meals of the day, and lastly consider her own time and strength. She must not put an undue amount of time or energy into meal preparation. And — what scarcely needs mention — the members of the family should be considerate of her and not object to this or that food and require her to prepare a special dish for a finicky appetite.

Thinking of dinner in terms of meat and potatoes, we may use a simple menu which calls for nothing but meat, a starchy vegetable — potato, a green vegetable, bread and butter, a dessert, and a beverage. For example: Beef stew with carrots and potatoes in it and apple sauce may make such a meal.

Our second menu is more elaborate — it calls for meat, two cooked vegetables, a salad, bread, butter, dessert, and beverage. Here we may have beef stew, cole slaw, and apple-sauce shortcake.

The third menu uses soup, meat, two cooked vegetables, salad, bread and butter, dessert, and beverage. For example: Clear tomato soup, beef loaf, baked potatoes, creamed cabbage, celery, fruit gelatin, and cookies.

We may elaborate still further — soup, fish, meat course, two vegetables, rolls and butter, relishes, salad, dessert, and beverage.

Beyond that we seldom go these days. In a cook book published in 1910 we find this menu for a holiday. See how our ideas have changed in the last thirty-some years.

Consommé à la Royal   Celery
Roast turkey
Garnish   Sausage cakes and Italian chestnuts
Escalloped oysters
Mashed potatoes   Sweet potato and almond croquettes
Sweet pickled peaches   Gooseberry jelly
Cauliflower, Hollandaise sauce
Cranberry frappé
Chicken salad, French style
Ginger ice cream   Hot apple pie
Neufchâtel cheese   Crackers
Black coffee [1]

[1] "Practical Cooking and Serving," Janet McKenzie Hill, Doubleday, Page and Co., 1910.

MENUS FOR SATISFYING DINNERS

MEAT	POTATOES OR SUBSTITUTES	VEGETABLES	SALAD OR RELISH	DESSERT
BEEF:				
Roast	Browned Potatoes or Yorkshire Pudding	Eggplant or Artichokes or Cauliflower	Curly Endive	Floating Island
Steak	Baked Potatoes or Hashed Brown	Spinach or Squash	Tomato Aspic	Caramel Custard
Casserole	Potatoes in Casserole	Diced Root Vegetables	Mustard Pickles	Open Apple Pie
VEAL:				
Cutlet	Baked Potatoes or Boiled Rice	Tomatoes or Cabbage au Gratin	Philadelphia Relish	Sponge Cake, Chocolate Sauce
Loaf	Creamed or Mashed Potatoes	Sautéed Carrots or Glazed Onions	Tomato Salad	Baked Apple with Cream
Fricassee	Boiled Potatoes or Rice	Diced Root Vegetables or Peas	Celery	Pineapple Delicious
LAMB:				
Roast	Potatoes, Riced or New in Butter	Creamed Carrots or String Beans	Cucumber and Pineapple in Gelatin	Cottage Pudding, Lemon Sauce
Chops	Scalloped or Creamed Potatoes	New Peas or Sautéed Parsnips	Pineapple and Cheese	Fruit Shortcake
Stew	Potatoes in Stew	Diced Carrots and Peas	Lettuce with French Dressing	Lemon Meringue Pie
PORK:				
Roast	Potatoes, Mashed or Croquettes	Grilled Tomatoes or Creamed Celery	Lettuce with Roquefort Dressing	Fruit Gelatin
Chops	Browned or Duchess Potatoes	Turnips or Dandelion Greens	Cole Slaw	Fruit Whip
Ham	Candied Sweet Potatoes	Asparagus or Spinach Soufflé	Apple Sauce	Orange Ice

FISH:				
Baked	Boiled with Buttered Parsley Sauce	Beets or String Beans	Perfection Salad	Cherry Tart
Pan-Fried	Baked or French Fried Potatoes	Tomatoes or Spinach	Sliced Cucumbers	Fruit Brown Betty
Creamed	Boiled Rice with Green Peppers	Peas	Celery, Olives	Fruit-Cup, Sugar Cookies
POULTRY:				
Roast	Mashed or Duchess Potatoes	Brussels Sprouts or Lima Beans	Cranberry Sauce	Apricot Ice
Fricassee	Boiled Rice	Buttered Asparagus or Onions	Waldorf Salad	Prune Soufflé
Fried	Mashed Potatoes or Balls	Corn Fritters or Eggplant	Mixed Vegetable Salad	Fresh Berries with Cream
Croquettes	(None needed)	Peas in Heavy White Sauce	Orange and Green Pepper Salad	Steamed Pudding, Hard Sauce
Pie	Potatoes in Pie	Glazed Onions	Frozen Fruit Salad	(None needed)

In planning menus use contrasts in color, flavor, texture, shape, and richness.
With BEEF serve: Horseradish, mushroom or Soubise sauce; strong-flavored vegetables; simple salads.
With VEAL serve: Tomato, brown or Espagnole sauce; root vegetables; salads with zest and crispness.
With LAMB serve: Mint, caper, or curry sauce; mild-flavored vegetables; green or bland salads.
With PORK serve: Cider, apple, or cranberry sauce; earthy vegetables; green or fruit salads.
With FISH serve: Tartare, cucumber, or parsley butter sauce; salads with cool crispness.
With POULTRY serve: Cranberry or giblet sauce, plum jelly; mild vegetables; any fruit or vegetable salad.
Dinner soups should be clear, thin, with meat or vegetable base. Do not serve cream soups at dinner.
Crusty rolls are better than soft hot breads.
Desserts vary according to preceding courses — a light dessert ends a substantial meal; an elaborate or rich dessert follows simple courses.

The wise meal planner lists daily the food needs for an individual and then fits her meals into that schedule. If the breakfast was heavy, the luncheon may be light and the dinner heavy. If the breakfast was light, then the luncheon should be heavier and the dinner medium heavy.

Meat Soups

The process of making soup from meat consists in getting flavor from the meat into the water. By cutting the meat into small pieces the water has a chance to dissolve proteins, extractives, and mineral salts that are in the meat tissue. But if the temperature of the water gets too high, it coagulates the protein. It may sear the cut pieces of meat so that the flavor is kept within the meat. Therefore, we start soup making with cold water, and keep the liquid from reaching the boiling point. Simmering is the condition we need.

When the protein has been coagulated, we find small, gray-looking curds. By removing those we take away practically all the nourishment in the broth. Beef tea made from desiccated bouillon cubes or from a dark brown, rich-flavored paste has no nourishment. It stimulates the appetite but in itself it hides no calories.

Women at home may make the clear amber bouillon or consommé, but the process seems out of date since canned soups of this type may be purchased for so small a sum.

In making soup something else besides the protein is taken from the meat and put into the liquid or broth. The fat is softened and separated from the tissue. It rises to the top of the soup. Why?

A dish of soup which is covered with myriads of glistening small fat globules has less fat than the one which is glazed over its entire surface. Prove that statement.

Blotting paper, ice, cooling of the soup to the solidifying point of fat offer the three ways of removing fat. Look up the methods and explain the processes. Which one seems most logical?

Canned soups need no additional seasoning, but aids for flavorful soups made in the home kitchen are parsley or celery — fresh or dried, pepper corns, herbs, "bouquet garni", celery seed, celery salt, catsup, onion, tomatoes, sauces like Worcestershire, soy,

"kitchen bouquet." Caramel cooked to the point where it is dark brown with no sweet flavor — a substance sometimes called "black jack" — is added to give color and body to a watery soup.

Meats, Poultry, and Fish

Once upon a time there was a bride-to-be who went to a home economics teacher and said, "I am to be married next week. I have four afternoons free. Please teach me how to cook."

The Home Economist said to her, "That's a large order. But we'll try. What do you want to prepare first?"

The bride-to-be answered, "Roast chicken with dressing."

The Home Economist was horrified and said, "Oh, no. We need something simpler to start with. Let's cook a steak or make a meat loaf."

Perhaps the teacher was right, but roasting a chicken is a simple process after all. It calls for little more technique or knowledge of fundamental practices than cooking bacon or steak. But the length of time required, the association of the dish with holiday and festive meals, gives the first impression that poultry cookery is different.

It is n't. There is really less chance of having a poor result with the chicken than there is with biscuit or cream sauce.

Processes which are long drawn out become invested with the belief that they are intricate.

What is there, after all, to meat cookery?

Meat is a protein. Proteins coagulate, stiffen, and become inedible when cooked at too intense heat.

Meat comes from animals. There is just as much chance of variation in two animals as there is of variation in two members of the human race. One may be tender and another tough.

Meat comes from various parts of an animal. Some parts of an animal are used more than others. Therefore, those muscles will be more developed.

Ann plays basketball and tennis. Martha is a spectator. Which one has better-developed arm muscles?

Jane is five and Janet is twenty-five. Which one has done more work, developed more muscle? Which one will have more tender muscle or meat?

Muscle and meat are used interchangeably in that last sentence. That is not quite correct. To get a true picture we must study the composition of meat.

Meat consists of bundles of muscle fiber held together by connective tissue. The muscle fiber is enclosed in a thin elastic membrane called sarcolemma.

The connective tissue may be white or yellow. White tissue is soluble in water and mild heat. Yellow tissue is not.

In addition to the muscle fiber and tissue there is fat in meat. It may be deposited throughout the muscle fiber or it may be deposited in large lumps. In good-quality meat it occurs in both forms. A piece of meat well marbled with fat has a better flavor when cooked than one which has slight deposits in the muscle fibers. A rib pork chop cooks up hard and dry in broiling or pan broiling because it has no marbling of fat.

Meat contains mineral salts — having sodium chloride, iron, and copper in relatively high degree; others in lesser degree.

Meat contains water.

Meat contains a few vitamins. Those which do exist are found mostly in the internal organs and belong to the B complex.

But meat does contain many extractives which are soluble in water, are made more flavorful by cooking, and are — alas — capable of doing damage to the body if taken in excess. Urea and uric acid are end products which may do the body harm.

So much for the construction of meat. Now let's consider its shapes. If you never have thought of placing the cuts of meat on yourself, suppose you play the game now. Think of yourself as being down on all fours. Where would you find a rib chop? What would a piece of shoulder meat look like? Locate a ham on yourself. A California or picnic ham is smaller than the regular ham. It comes from the shoulder or fore leg of the pork animal. Would a California ham on yourself be smaller than a ham on yourself? Where, on you, would you find a piece of round steak? Where would you find a flank steak? Where is the tenderloin?

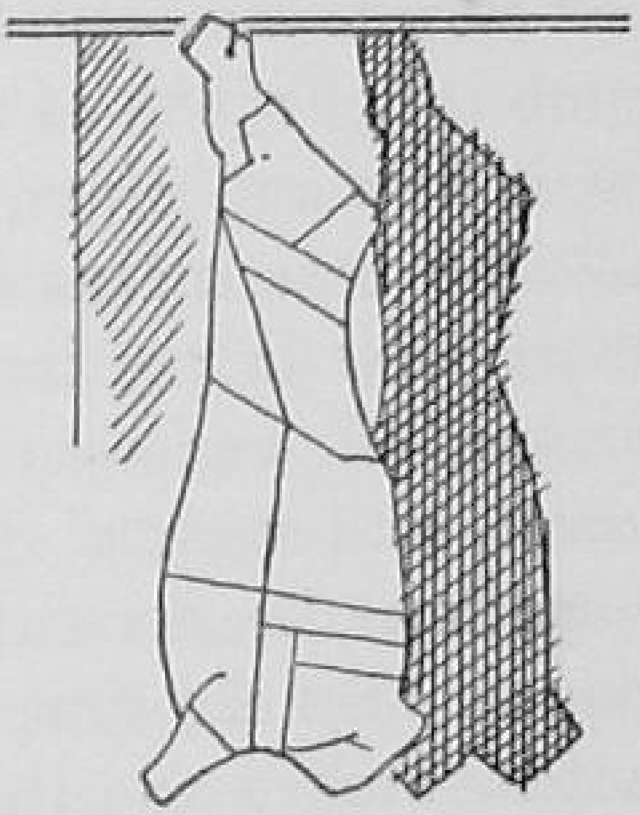
Now let's leave ourselves and turn to the beef animal and the lamb. Does a beef animal have a chop? A lamb does. What is that cut in a beef animal?

Hunt up a description of a crown roast of lamb. How large a

platter would you need, how immense an oven, and how long a time of cooking for a crown roast of beef?

Study a meat chart and see the similarity in cuts in the various animals.

How may you be sure you will get good meat? By going to a reliable butcher and staying with him as a customer. Let him learn what you want, what you like. Don't shop around for meats. Go to him at a time when he is not busy and ask him to help you identify the cuts of meats.



After you have your choice of meat at home, find the best way to cook it. Cook books are a help at this time.

A comparatively recent booklet sums up the newest findings in meat cookery. It uses the terminology agreed upon by home economists and it precedes each type of cookery with a brief discussion:

"**How to Recognize Quality in Beef.** Good conformation will give the retail meat buyer cuts which will contain the greatest proportion of meat to bone. Also an animal which has good conformation will mature early and so will be tender. The best finish in beef implies a smooth covering of brittle, flaky, white fat over most of the exterior and a much thinner covering over the interior surface of the ribs; there also will be liberal deposits of fat between the larger muscles and generous distribution along the connective tissues and between the muscle fibers. It is this characteristic which gives the cut surface a streaked appearance that is known as marbling. Best quality in beef is indicated by a lean of a bright cherry-red color, good marbling, firm, fine grain; a cut surface which is smooth and velvety to sight and touch. Red, porous bones indicate a young animal as contrasted to the white, flinty bones of the older animal.

"**How to Recognize Quality in Veal.** The lean of veal is pinkish gray in color. The meat is fine grained, but does not show the marbling of the older beef. The proportion of connective tissue to lean is greater than in beef, as also is the percentage of bone. There is not much fat, but that is clear, hard,

and white. The bones are porous and reddish and the ends of some are cartilaginous.

" **How to Recognize Quality in Pork.** The lean of pork is a light, grayish pink and is well marbled. The flesh and the white fat are firm. Pork fat is not so brittle as beef fat. The bones are soft with a slight tinge of red.

" **How to Recognize Quality in Lamb and Mutton.** The flesh of lamb is light pink as contrasted to a dark pink in mutton. Lamb fat is firm and white, but not so hard as mutton fat. The bones are the best means of distinguishing lamb from mutton — the *break joint* in particular. In young lamb the fore feet may be broken off, exposing four well-defined ridges which are porous, moist, and with a slight tinge of red. Older lamb or yearling sometimes breaks with a hard, whitish appearance to the saw-tooth ridges. By the time the mutton stage is reached this joint cannot be broken and the feet are taken off below the break joint, at the round joint.

" **Grading and Stamping.** In 1927 an innovation in meat merchandising was introduced. This was grading and stamping fresh beef according to quality. The stamp is put on in such a manner that practically every retail cut bears the grade mark. This enables the purchaser to know the grade of meat which he is buying.

"At first the service of grading and stamping was limited to beef, but it has since been extended to lamb also. The service has increased greatly and graded and stamped fresh meats may be found in many markets.

" **Federal Meat Inspection.** The stamp of quality discussed in the preceding paragraph must not be confused with the round purple stamp which is the symbol of Federal inspection. This round purple stamp is the guarantee that the meat is from federally inspected animals and is wholesome. All meat and meat products which are processed by packers engaged in interstate commerce are subject to Federal inspection. The ink used in marking the carcass is a pure vege-

table coloring and is absolutely harmless. There is no reason for cutting away this stamp before cooking."[1]

Modern Methods of Cooking Meats. On a previous page of the booklet the newer findings of meat cookery are summarized. These findings are the result of thousands of tests made in laboratories in colleges, universities, test kitchens of meat packers and of the Home Economics Department of the United States Department of Agriculture.

On pages 526 to 528 are definitions of meat-cookery methods. They include three B's — bake, broil, and braise — and four S's — stew, sear, simmer and sauté. To find the real definition of "roast" see "bake." Bake means "to cook in dry heat, as in an oven." When we roast our meats, therefore, we really bake them.

Time was when this was not true. Before stoves were invented meat *was* roasted, and said to be ready for the table when it was "done to a turn." Did you ever wonder where that phrase came from? A haunch of venison, let's say, used to be impaled on a hook, called a spit, which was hung before a roaring open fire. The flames seared and burned the side of the meat nearest to them. A way had to be found to keep the meat revolving, so it would be done on all sides. First, boys used to walk round and round, pulling and turning the meat as they did so. Later dogs were trained to do the turning, but finally an ingenious mechanical device called a "turnspit" did the trick. When this had revolved long enough, the meat was "done to a turn."

As the meat cooked the rich juices would mix with the fat and drop to the floor. By setting a pan under the roast these juices were caught and then spooned up and over the meat, thereby doing what meat cooks called "basting."

Later stoves with ovens came into general use. The oven was the place they put the meat. Into a roasting pan the meat went. Because the heat was less intense in the oven than directly before the flames, the cooks heated the whole surface of the meat before it went into the roaster. They coated it with flour, too. The oven was very hot to approximate the open flame. Cooks feared the meat might burn before ever the fat began to liquefy, so they

[1] From "Ten Lessons on Meat," 2nd Revised Edition, 1933. Prepared by National Live Stock and Meat Board.

decided to put some water in the bottom of the pan. They believed they must continue to use the old-time basting process so every so often they pulled out the hot roasting pan from the oven and spooned the liquid over the meat.

Some inventive person wondered whether it might not be possible to so construct a cover for the pan that the steam, which arose as the meat cooked, would be held and changed to liquid which would fall back on the meat, doing all the basting that was required. Self-basting roasters became popular.

When the meat came out it was said to be roasted. Really it had been steamed and cooked at so high a temperature that the muscle fiber was tough, and shrunken, while all the fat which marbled the meat had been liquefied. A roast came out of the oven weighing at least one-third, frequently one-half less than when it went in. Meat cookery was at a sorry, sorry stage.

Today meat is "roasted" in quite a different fashion. The roast is not seared; it is not dusted with flour. It may or may not be salted at the start. The meat is set on a rack or a trivet in the roasting pan, preferably a pan which is heavy and dull and a good spreader of heat.

The meat is placed so that the fatty side is uppermost. For example, the standing rib roast is set with both ends of the bones resting on the bottom of roaster or rack, thus putting the hump uppermost. A rolled rib roast is placed with the rounding part uppermost, not with the flat eye of meat uppermost.

The temperature is set at 300° F. or 325° F.; for pork at 350° F. No basting is required because the fat liquefies and works its own way downward through the meat fiber. Since salt penetration is never deep it may be added during cooking. The roaster is not covered, since roast meat is baked in dry heat. A cover would hold in moisture and steam the meat.

In the electric roaster it is essential that the cover be kept on. However, the cover of a roaster of this type has vents of fair size through which the steam escapes.

How do we know when the roast is done? Formerly we used to go into a huddle with arithmetic and fractions. Cookbooks said for lamb do this, for beef do that, for veal do something else. Such as: allow eighteen minutes to the pound, an extra twenty

minutes at the start. Suppose a roast weighed six and seven-eighths pounds. See how complicated everything became. Six and seven-eighths multiplied by eighteen, plus twenty. And those figures did not say that a roast when cooked for that length of time, granting that one's arithmetic was correct (which it usually was not) would be rare or medium or well done.

And — this always seemed odd to a careful cook — one roast cooked a precise number of minutes was not done to the same degree as another roast of the same weight cooked identically the same length of time.

The difference, we now know, lies in the "conformation" of the meat. Suppose one six-pound piece of meat contained two pounds of bone and another only one-half pound. The amount of meat in the two is different; after all it is meat that is being roasted and not bone. To get roasts done to the same degree regardless of size or conformation, it is necessary to use the roast-meat thermometer. This is inserted into the eye of the meat, where it will not be imbedded in fat or touch bone. When the thermometer tube registers "rare" the meat's internal temperature is always the same. If meat is liked "rare," then is the time to remove it from the oven.

The internal temperature of the meat rises slightly for a short time after removing the meat from the oven, but few of us are so precise in the degree of doneness wanted that this makes an appreciable difference.

With this new method of roasting meat we save ourselves energy — there is no searing or basting required; we save ourselves arithmetical computations; we save ourselves worry over the "doneness" of the meat; we save ourselves work — no roasting-pan cover to be washed. Most important of all, the meat is juicy, tender, well flavored. In addition less poundage of meat is lost during cooking because the shrink during roasting is slight.

If we gain all these things what do we lose, if anything? We lose the chance to have Franconia potatoes, those delicious potatoes which should be roasted with the meat, acquiring flavor and brownness from the drippings. We can have Franconia-type potatoes, however, deliciously good, if we parboil the pared potatoes in boiling salted water, drain them and let them finish cooking in

with the roast. If put raw into an uncovered roaster, they dry out before they are done.

We need to vary our method for making gravy, because there is not so much of the meat goodness in the bottom of the roaster. Gravy of meat roasted in the modern way is enriched by dissolving one or two bouillon cubes in the drippings in the pan and adding water, then thickening and flavoring in the usual way.

We keep the roast in the oven approximately one-half hour longer than when we overcooked it at the high temperature. We need to have a fair knowledge of the approximate amount of time required for roasting. We need to know that, by and large, twenty minutes a pound is surely going to be required. Armed with that knowledge which tells us *about* how long before the meal the meat should go into the oven, we depend upon the precision of the thermometer to tell us when the meat is cooked.

Are there any other new developments in meat cookery?

Yes, we need less intense heat for broiling meats. The broiling compartment is made as hot as it can be, the chops or steaks, cut at least one inch thick, are placed on the hot broiler grid which is three inches from the source of heat. The regulator is now turned to 350° F. The meat is broiled for ten minutes at this temperature, then turned and broiled for ten minutes on the other side. An additional two minutes per side done at the last by turning the heat back up to its maximum gives nice rich brown crustiness to the outside.

Broilers on modern ranges are so constructed that the fat disappears through narrow slots into the lower part of the broiler, which is kept under cover so that the fat will not smoke and burn.

We neither broil nor pan-fry pork chops. They are at their best when seared and then braised. Braising gives well-flavored, tender meat whereas pan-frying or broiling makes pork chops hard and dry.

Modern hams require no soaking, no parboiling, simmering, cooking or standing in hot water. When they are to be baked they are set fat side up on the rack in the roaster, cooked according to roast-meat thermometer rating, to 185° F., and come out juicy and tender. After the first hour of cooking they may be coated with crumbs and brown sugar, diamond-scored on the surface,

stuck with whole cloves and basted with almost any sweet-sour mixture of liquids whose flavors penetrate somewhat into the meat itself. The new methods of ham treatment in the packing plant have tenderized the meat and cut down on the cooking time required. The smoky flavor is less apparent but the cure is more mild, less salty, and the quality more uniform.

In the discussion we have disposed of bake, broil. What about the other "B" — braise?

Braising is cooking at low temperature in small amounts of liquid which frequently is acidulated. The casserole in which the cooking is done is covered and is set in an oven. Pot-roasting is the same kind of cooking done on top of the stove. The cooking time is longer than for dry baking or roasting and the liquid, while greater than that used in roasting, is less than in simmering.

Turn to page 526 and you will find the statement "meat should be simmered and not boiled." What is the difference?

When a mixture is boiling there is great agitation. The whole mass is in a state of upheaval. Bubbles rise and break with great rapidity in a continuing process. When a mixture simmers the mass is almost calm. A bubble rises lazily, breaks, another rises, causing little commotion. Meats should be cooked in liquid as gently as that. Why? Intense heat coagulates the protein, stiffens muscle fiber. Stiff fiber and coagulated protein are tough and hard, a result we certainly do not want in meat.

A lamb stew simmers itself lazily into tenderness. Even corned beef needs to simmer if it is to be edible after being cooked. It is necessary to keep low temperatures all the time, too. Rapid cooking for as little as ten minutes can undo the gentle simmering of three hours. You recall that one dip into boiling water can shrink and harden your woolen sweater beyond the power of any subsequent lukewarm water to counteract. In meat cookery "stew" and "simmer" should be synonymous.

Earlier mention has been made of searing. Application of great heat to the surface of meat sears it and seals the cut muscle fiber. We have been logical in thinking this prevents escape of meat juices. It's a good theory, but not so necessary in practice. Searing does little for meat beyond making it smell most delicious at the time of searing. Too long searing changes the pleas-

ing aroma to that of singed protein, which is acrid and never pleasant.

Sauté is the term we use for what used to be called "pan-frying" or even more loosely, frying. We think of sautéing as cooking in a heavy pan set over the flame or heated coil. In the pan is a thin film of fat. We reserve the word "frying" for cooking in "deep fat." Chops and steaks may be pan-fried.

The quick-frozen meats are coming into the market in increasingly larger amounts. Studies made regarding this cookery may be summarized as follows:

"Is it necessary or desirable to thaw meat before cooking? This is one of the questions frequently asked.

"Child (*Thawing and Cooking Frozen Meats*, University of Minnesota, Agricultural Extension Special Bulletin, 159, 1937) says in respect to this point, 'Four cuts from the same animal, as nearly comparable as possible, were frozen for 48 hours. The cuts were thawed at three different temperatures: refrigerator temperature 36° F.– 38° F.; at room temperature, 70° F.; and in the oven at 300° F. There was practically no difference in the flavor of the roasts thawed at these different temperatures, or in the flavor of the thawed meat and the unfrozen meat.

"'The studies showed that whatever method of thawing is most convenient may be used. If there is not time to thaw the meat, put it in the pan frozen, being sure to allow extra time for cooking. If time and space are available, the meat may be put on a rack with a pan under it and allowed to thaw at room temperature. If there is space in the refrigerator and the meat is not needed for a few days, let it thaw in the refrigerator.'

"If it is found more convenient to put the meat on to cook in a frozen condition, it is necessary to know how much longer the cooking period must be. In other words time enough must be allowed for the meat to thaw and then to cook.

"Frozen meats take from twenty to thirty minutes longer per pound than unfrozen roasts. For instance, a porterhouse steak one inch thick broiling rare to medium will require eight to ten minutes' cooking if the meat is thawed; twenty-one to thirty-three minutes' cooking if the meat is unthawed.

"All pork must be cooked to the well-done stage. Special care should be taken when cooking frozen pork since the internal tem-

perature of 185° F., which indicates well-done pork, may not be reached if sufficient time is not allowed for cooking.

"Frozen meat which has been thawed before cooking is cooked by the same methods and with exactly the same procedure as meat that has not been frozen at all. In other words it may be roasted, broiled, pan-broiled, braised, stewed, or cooked in water, according to the cut.

"The same methods are used for cooking unthawed meat, except that the cooking period is enough longer to thaw the meat." [1]

Poultry, Game, and Winged Birds. Have you ever eaten wild duck or pheasant? If so, compare its flavor, texture, and color with that of domesticated duck. There is no better proof of what civilized life does to an animal. The wild fowl are lean, with muscles tense and strong from continual self-defense and their hunt for food. The domesticated animals are soft from easy living. They have much fat and flesh that is white and tender. No wonder man, like other animals, develops into a portly well-fed creature.

Because the wild fowl are so lean of flesh it is necessary to cook them differently from their fat and prosperous cousins, the chickens, hens, ducks, turkeys, and geese. Wild fowl need larding if roasted, and are best if somewhat underdone. Their high, gamey flavor needs accompaniments like wild rice, tart jellies, celery.

Bear and deer meat should be hung in a cool place for at least three weeks before it is cooked. Then it is marinated, or larded, or broiled under a quick flame. Rabbit meat does not need hanging for ripening as much as it needs treatment with vinegar or a spicy marinade to take away some of the game or strong taste. Once that is done, the flesh may be cooked like chicken.

Poultry breeders have spent years developing chickens to the form we like — tender breasts, plump thighs, juicy meat. Now that they have accomplished that, they are starting in on turkeys. The decreasing size of families, of dining rooms, and of dining-room tables is making the large twenty to twenty-five pound

[1] Reprinted through the courtesy of the National Livestock and Meat Board. From "Food and Nutrition News."

turkey a drug on the market. Consequently the breeders are developing a shorter-legged bird with plumper thighs, more compact body, less frame with more meat in proportion.

But while that evolution is being brought about it is possible to buy and to use, satisfactorily, a half turkey. In Spain one goes to a poultry counter and asks for, let us say, six chicken wings. The wings are hacked off and sold while the rest of the carcass remains hanging. The dealer hopes the next customer will want legs. Something similar is developing in this country.

Poultry and fowls are cooked in a number of ways. The young and leggy broiler is split down the back and broiled. The next older fowl may be cooked by encasing the dismembered pieces in batter and frying them in deep fat, or by frying them in quite a bit of fat in a heavy frying pan. Next comes the fowl which has enough meat to allow cutting the carcass for fricassee. The legs and wings are cut off, the breast is split in two, the back is cut and left whole. This gives seven servings from one bird.

In fricassee the pieces are usually coated with flour mixed with a little salt, then sautéed, and finally cooked slowly in a comparatively small amount of liquid.

Stewed chicken with rich, thickened gravy may be poured over hot baking-powder biscuits that have been split and buttered. This is not a dish for dieters.

Or the cooked chicken may be left on the bones, be enriched with gravy, and covered with a pastry crust, later to come to the table as a delicious chicken pie.

Chicken, which is roasted, has the interior stuffed with a dressing or forcemeat. The stuffed chicken is roasted, brought to the table whole, where its glistening sides, its rich stuffing bursting from the interior bring forth "oh's" and "ah's."

Turkey, goose, and duck are usually prepared for roasting. They, too, are stuffed. Since goose is rich, a tart fruit dressing is put in, or a dressing of sage and onion satisfies the British traditionally inclined diner.

Fish and Sea Food. People who live on a seacoast feel that inlanders miss some of the best food there is — sea food freshly caught and prepared. So close is the source that the tang of the sea is still in the air.

Those who live near bodies of fresh water have the same feeling of pity for people who have no source for fish other than the nearest fish market. But with the advent of the "frosted" food processes it would seem as if the advantages of seacoast living could be brought straight to the doors of the most inland of inlanders.

Fresh fish does not float on water; it has a clear, full eye, firm flesh, and scales that glisten and cling tightly to the flesh.

The flesh of fish does not stand long shipping unless it is iced or refrigerated. This applies equally well to creatures like crabs, clams, oysters, lobsters, shrimps, prawns, and any of the briny-deep animals encased in shells.

Since fish consist of flesh which is largely protein, it is necessary to observe the usual rule for cooking proteins. Too long cooking, cooking at too high a temperature, toughens the product. A coating of crumbs or cornmeal offers a protection to the too tender flesh.

In cooking fresh fish we may broil, plank, pan fry, sauté, boil, steam, or bake them. When they are to be baked, they may be filled with a cracker dressing made tart with chopped pickles. Because the flesh is so tender and breaks apart so easily many cooks wrap fish in parchment paper or in cheesecloth, especially when steaming them.

Lobsters are cooked in a seemingly inhumane fashion. A live lobster is dropped into boiling water. As the heat cooks the flesh and permeates the shell, its color changes from a dark green to a brilliant scarlet. "Red as a boiled lobster" is a self-explanatory phrase.

When purchasing a ready-cooked lobster in the shell, the tail should be pulled. If it springs back into its original position, the animal went into the lobster pot alive.

A dish of melted butter accompanies lobster served in the shell. Claw crackers and a short-tined fork to draw out the meat from the many claws are necessary utensils.

Codfish comes to the market in the form of dried codfish steaks, fillets, flaked salt codfish, and ready-mixed potato and fish for cod-

fish balls. The salt fillets need soaking in warm water to draw out some of the salt which has been put in as a preservative. Fresh cod is on the market in eastern fish markets.

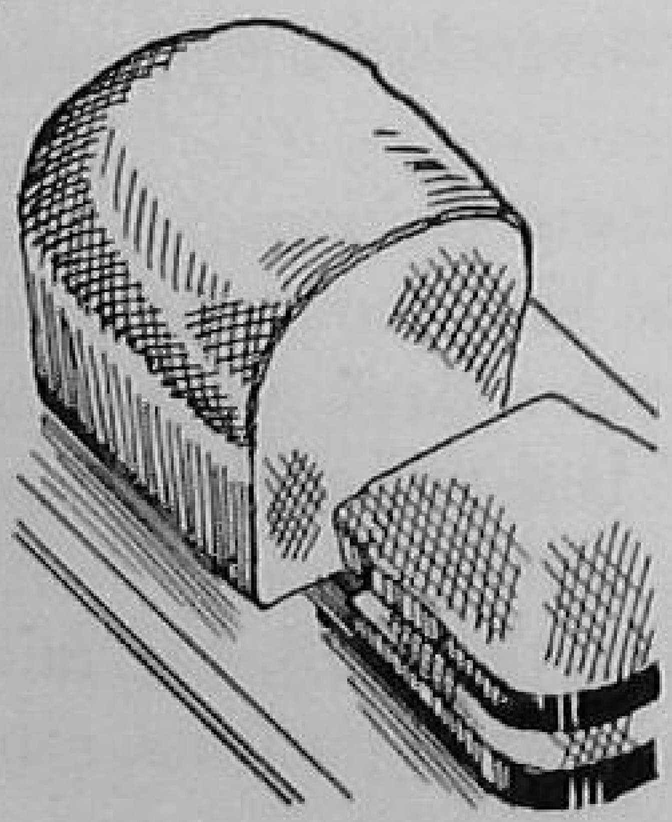
Salted fillets of herring, split, smoked, are known as kippers. These are usually broiled and served hot.

Well-known fish that spawn and thrive on the Western coast come to inlanders in the form of canned salmon and tuna fish.

Oysters are in season all year now, thanks to quick freezing and refrigerated shipping. No longer need they be caught during spawning season, which coincides with the high temperatures of those months whose names are spelled without an R. This sea food may be used for a cocktail, used in stew or broth, fried in deep fat, or combined with a rich thick sauce and baked in the hollowed interior of a loaf of bread.

Clambakes are popular on the seacoast. The food served is delicious but rather messy. A deep hole is dug into the ground. This is heated with embers. A "bake", consisting of clams in the shell, lobster, chicken, sweet potatoes, and corn on the cob, is cooked under a heavy blanket of seaweed by this stored heat. Coffee and crusty French bread, sliced tomatoes or pickles, and watermelon, complete a delicious, albeit drippy, meal.

Breads



Bread has been called the staff of life, and bread and butter a gold-headed cane.

Did you know there are men who collect canes or "sticks"? They own malacca ones, heavy gnarled ash, sticks of ebony, sticks of rattan, and of bamboo. A man with a big collection selects his stick to match his mood or his activities.

In the staves or canes of the bread world there is large variety, too.

Let's see how many you know — beaten biscuit, baking-powder biscuit, muffins, gems, popovers, waffles, griddle cakes, scones, coffee cake, cinnamon kuchen, apple kuchen, rolls, buns, twists, crescents, horns, as well as raisin, orange, graham, whole wheat, and white bread.

You ought to add at least ten more kinds of bread to that list. Look in the cook books. Did you notice that the first eight in the above list are usually served hot while the others appear on the table cold? When is a white bread served hot? No, we don't refer to a freshly baked loaf.

Let us group breads into two classes — hot breads or those raised by the interaction of soda and some acid, and breads raised by means of yeast. Making either kind is an accomplishment. A girl can take just as much pride in a loaf of freshly baked bread as she can in a loaf of johnny-cake.

But plain bread making has gone out of the home. It is no longer a sign of shiftlessness to buy "baker's bread." Frequently, it is a sign of good economic sense.

This means that we substitute intelligence in buying bread for skill in home bread making. There are standards in bread whether it be homemade or purchased at the store.

Suppose we start with a discussion of bread making.

Yeast is a microscopic plant which grows in the presence of moisture, warmth, and its favorite kinds of food — starches and mild sugar solutions.

In growing, it gives off carbon dioxide, a gas, and alcohol.

Carbon dioxide aërates or leavens dough in which it finds itself enmeshed.

Alcohol is driven off by evaporation as dough is baked.

To hold the gas securely enmeshed it is necessary to have a sticky, rather tenacious mass of dough. Such a dough is developed when flour containing a large amount, proportionately speaking, of gluten is moistened and kneaded.

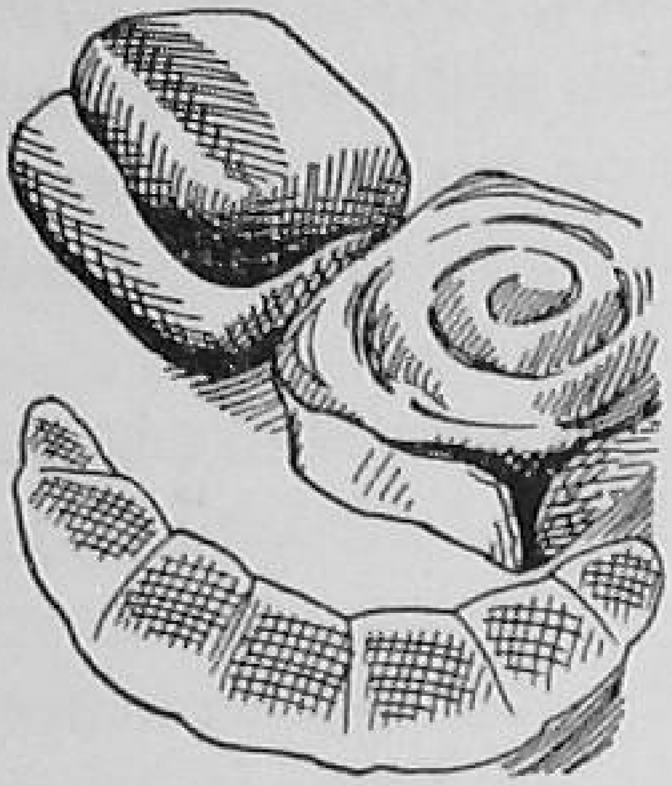
Flour comes from wheat sown in spring and harvested in summer, called spring wheat, and from wheat sown in fall and harvested in summer, called winter wheat. Winter wheat develops a large amount of starch. Can you see why?

Spring wheat develops glutenin and gliadin, two protein substances which unite, in the presence of moisture and under strain, to form gluten. Spring wheat is used for bread flour.

The first bread ever made was unleavened. A cave woman, or her ancestor, stirred up some water and some wheat which had been macerated by grinding between two stones. This paste was

baked. It was flat in shape and in flavor. Perhaps she mixed up more than she needed one day and left the pasty mass standing in an open dish.

Wild yeasts are always floating in the air. Some fell down on this mass and found food much to their liking. They grew and grew and the mass began to bubble. Doubtless the woman never noticed the difference in the dough. But when she baked it, lo! there were holes in it and it had a rich flavor! So the next day she left some more dough standing around. It grew spongy. From this experience the idea of leavening bread came to pass.



True enough, this is all conjecture but it sounds plausible. If it does n't seem so to you, you make up another story to explain the original use of yeast in baking.

It's too long a tale to tell here — the development of yeast making and the discovery that cultivated yeasts gave a uniform product while wild yeasts gave varying kinds of bread.

Nowadays we purchase compressed, loose or dry yeast cakes. Bakers use a liquid yeast. But one and all, they depend upon the principle of cultivated yeast plants of a certain sort gathered together into a compact mass.

If you think any wild yeasts which are in the air may be used, just ask grandmother to recall some of her experiences with salt-rising bread.

Potato yeast, which is still used in many country homes, utilizes the starch in the potato and the warmth and moisture in the liquid, to furnish food for yeast plants which may have been left over from a previous batch of yeast, or from a cake of commercial yeast added to the potato mixture. Only too often wild yeasts grow in this medium and bread develops queer flavors and characteristics.

To make a yeast dough, crumble yeast cake into lukewarm water to which is added a small amount of sugar. Boiling hot or extremely cold water kills or numbs yeast plants. Lukewarm water is just right. You may use lukewarm milk, too.

As the yeast begins to grow the mass in the container gets bubbly.

In the meantime, you have sifted some flour, have scalded milk or water, added butter or shortening, cooled the liquid to lukewarm. Now you add the yeast to the liquid. Then you stir in flour. If you put in only enough to have a soft, runny dough, you make a sponge. If you add enough to have a stiff dough, you use the second accepted method of bread making.

Since the sponge is light in weight, the yeast can lift it easily as it grows and the mass doubles in bulk quickly. At this stage more flour is added and the mixture is kneaded until smooth. Kneading develops the gluten. The gluten in the stiff dough holds in the carbon dioxide. As a result you get a light, spongy dough.

To get the best results you have kept the dough in a warm place, and covered it to keep out stray yeasts, molds, or bacteria which are in the air and which are looking for a good feeding place.

After the dough has risen and doubled in bulk for the second time you knead the dough until satin smooth. Then you shape it and set it to rise again. When doubled in bulk, you put it into a hot oven. Here the temperature stops the growth of the yeast plant, stiffens the starchy, spongy mass, drives off the alcohol, browns the crust, and finally gives a delicious loaf of baked bread.

Rolls are usually made of dough enriched with more shortening and sweetening. Both shortening and sweetening retard the growth of the yeast plant, so rising is slower.

If a kuchen is wanted, the dough is rolled or pulled into a flat sheet, the top is enriched with sugar, cinnamon or other spices, fruit, or butter. It is baked, and eaten with gusto.

Bread dough may be rolled flat, covered with poppy-seed mixture, rolled, shaped, and baked. Or it may have soft butter, sugar, cinnamon, and raisins spread on it before rolling. It may be shaped into balls which are set into muffin pans. In the bottom of each muffin pan is a caramel and pecan nut meat mixture. When baked and taken from the pan, the roll is "gooey" with caramel and rich with nuts. These are pecan rolls of calorie fame.

There are other uses for bread dough. It may be combined with rich, fruity cake mixture and made into election cake.

It may be fried in deep fat and reappear as fried doughnuts.

It may have apple sauce put on squares of it, which are then folded into a cocked hat and fried in deep fat as apple-sauce pies.

It may be further enriched and treated in special fashion to make delicious French brioche.

Just plain everyday bread may well be purchased, as we said earlier, but every girl should know how to make fancy breads. They add to her list of accomplishments.

If a girl were living in an apartment and working in an office, it would be uneconomical for her to bake bread. Why? Consider element of time, amount she would eat, and storage space for raw material.

If small children keep a mother at home all day, if she needs to keep the stove going for warmth, if her family is on a budget, and if they eat a large amount of bread, she would find it more economical to bake than to buy bread.

If there are two in the family, both employed, eating lunches down town and the bread consumed at home is one loaf in one week, it would be uneconomical for bread to be baked at home.

Bread is an economical food because it is filling, cheap in price, furnishes bulk, energy-giving foods and, if milk is used in the dough, adds proteins and may add vitamins.

The benefits of enrichment were brought to our attention by the War Food Administration's order to bakeries to enrich all white bread and rolls during the war. No order was issued concerning flour enrichment, which remains on a voluntary basis.

In buying bread we want to get a loaf which comes from a clean bakery. Why? We want a loaf which has been wrapped in paraffin paper before it left the bake shop. Why?

We want one which has a good nutty flavor, a golden brown crust, an even grain, a creamy or colored crumb. Why? We'll answer that one — because those are the characteristics of a loaf of good bread whether it be baked at home or in the bakeshop.

Score cards give us a measure against which to appraise our products. Study those in the appendix (pages 520, 565, 579).

Pastry

When an American is away from her native land for any length of time and then happens to meet another wandering American,

there is one subject of conversation which is participated in with interest — the foods they have missed and the foods which they will choose just as soon as they are back on American soil. "And lo! pie's name leads all the rest."

No other country makes pie quite like we do. That statement sounds as though there were a standard of excellence in pie baking throughout the breadth of our land. Alas, there is not.

Pies with pale and pallid crusts, pies with floury tops, pies with crusts as tough as sole leather, pies with fillings that are over- or under-flavored, "delusive pies that are like heads full of lumps and bumps with nothing much underneath" — all of these are found much too often.

It's a wonder, really, that we long for pie, considering the number of poor ones that are served.

But pie can be good. When the under crust is well baked, the filling pleasantly sweet and spicy or tart, the upper crust short, tender, and well browned, then we are approaching a pie at its best.

The perfect fruit pie may give a hint of its goodness by the appearance on the upper crust of a little of the juice which has bubbled through the scrolled opening cut in that pastry topping.

If the pie is an open one, there may be rich goodness oozing over the twisted lattice top. And if it be the custard variety — cream, cocoanut, pumpkin, lemon meringue — there is a quivering satin smoothness to the filling.

Now those are perfect pies.

What are the ordinary faults of pie mixing? Too much water, the wrong kind of shortening, too much manipulation in mixing the crust.

Let us consider shortenings first.

The most tender crust results from the use of cooking oil, then in order as they contribute tenderness, hydrogenated shortenings, then lard, and lastly butter.

Hard fats give a more flaky crust than the ones with a lower melting point.

Butter gives a more flaky crust than an oil, but not as short and tender a crust.

Manipulation comes next in importance in giving good pie crust.

The hot-water method of mixing pie crust ensures a crust which is crumbly, rich, short, and tender. The lack of flakiness is more than compensated for by its shortness.

The melted fat coats particles of flour and prevents them from sticking in a sodden starchy mass as they would if water only were added.

When the mixed paste is well chilled, there is a certain amount of expansion of the cold enclosed air during baking.

The cold-water method is the old accepted one.

When solid shortening, such as butter, hydrogenated fat, or lard is used, it is wise to cut it into the flour with two knife blades, used scissors fashion. There are commercial pastry blenders and pastry forks which do the work well. Because they are not solid pieces of metal like a spoon bowl they do not mash the mixture. No matter what method of manipulation is used the shortening is cut in only until it resembles coarse sawdust.

It is wise, also, to avoid the use of hands in working in the shortening, since we are counting on the cold air within the pastry to expand and lighten or aërate the mixture once it gets in the oven. Why?

Of course we may chill the paste thoroughly after mixing, but shortening which has been partially melted will not yield as flaky a crust, even after chilling, as one which was left in coarse particles.

Right here we have the difference between the hot-water pie crust, which is short, tender, and crumbly, and the cold-water method, which is short, tender, and flaky.

To get flakiness we need bits of fat separating layers of flour. When the fat melts in the oven temperature, it allows all the cold air which surrounded the original lump to expand and lift one layer of paste above another.

In the cold-water method we use cold water to bind the paste together. Just enough is used to hold the mass. It may be rough and crumbly on the outside but still have the particles adhering to one another.

It should not be worked into a smooth ball. Twenty-five strokes will be ample to combine the water and flour-shortening mixture.

Every additional bit of flour which is added, every extra manipulation is going to subtract from the tender, flaky crust desired.

Therefore, flour the board, but only lightly; put on it a lump of paste no bigger than is needed for any given crust; roll the paste with short, deft, quick movements of the rolling pin. Don't scrub the dough around. Hold the rolling pin in a hand of steel clothed in a glove of velvet.

Fit the paste into the pie plate after lifting the paste from the pastry board. A spatula will assist in removing the paste intact. Be sure the paste fits well where the side of the plate joins the bottom. Bubbles of air left between the paste and the plate will expand in baking just the same as air within the paste.

If the paste is to be baked as a shell, having a cooked filling put in later, there are four possible procedures.

Prick the entire surface of the paste with a sharp-tined fork. This allows trapped air to escape and prevents the air from making big bubbles under the shell.

Or put a layer of dried beans or rice in the unbaked pie shell. The weight of these keeps the shell in shape. They are emptied out after baking and kept for repeated use.

Or grease the bottom of a heavy pie plate of the same size as the paste-lined one and set it into the lined plate. Its weight holds down the crust.

Or fit the shell over the outside of the plate and bake. Later slip the baked shell off. This method prevents the building up of an attractive rim.

The rim is made from an additional strip of paste attached to the shell before baking. The rim may be crimped between thumb and finger, marked with door key or with fork tines.

Whenever two pieces of unbaked paste are to be put together, rub one of them with cold water. It helps to bind the two as surely as glue holds two pieces of paper together. What principle of starch action is applied here?

Instead of fitting the paste into a pie plate it may be rolled into a sheet and cut into circles or squares. A filling is put on one half of the paste and the other folded over, held in place with cold water. Edges are crimped. The top half is decorated with some openings, which are really more than openings. They allow the steam from the cooking filling to escape during baking. These pastries are called turnovers. Why?

Cakes

Shakespeare has a certain character say on the failure of an enterprise, "My cake is dough." Have you ever felt like saying the same thing? And not about cake necessarily, but about something you had planned to do which fell flatter than a pancake? Ah! note that comparison. Cakes seem to be used in phrase making and in pithy sayings. One such is "You can't eat your cake and have it too." Marie Antoinette is said to have used an allusion to cake in a way that proved tragic for her. When the hungry French rabble stormed the castle and complained because they had no bread, she said airily, "What, no bread? Why don't they eat cake?" Ask your history or French teacher to explain the true inwardness of that remark. It was not so heartless as it sounded. But the people who heard her never forgave her.

There is another cake comparison. People with a certain undesirable trait are described as "cake eaters." Can you explain? Its use in that phrase implies that cake is a luxury. Luxury or not, most of you are familiar enough with cake to be able to answer these questions:

Why do you suppose a sponge cake was given that name? An angel food; a devil's food; a sunshine cake?

Pound cake is well named. Why? Now don't slander that cake! It is one of the best ever made.

What characteristics give a cake the name of layer; of loaf? If you had to make a marble cake, how would you go about it?

You won't know the answer to this one, but Mother will: What is the difference between a bride's cake and a wedding cake?

Of late years college classes in home economics have done much work on muffins and cake batters. The director of the research kitchen of a stove company has experimented, tested, and tried recipes and methods. So have the test kitchens directed by magazines and by companies that manufacture flours, baking powders, and shortenings. Much of their material is highly technical. Much of it, also, proves scientifically what Mother and grandmother had learned by experience.

Division of Cake Types. Cakes are divided into those made with butter or shortening and those made without it.

Butter cakes are the common loaf, layer, and cup-cake varieties.

Butterless cakes are sponge, angel food, and sunshine.

There is a combination butter and sponge cake used by bakers for Genoese cakes, but on the whole the lines of demarcation are clear cut.

Cakes with Butter. Pastry flour makes a more tender cake than bread flour. Why?

Butter gives a better flavored cake than a substitute shortening.

Fine granulated sugar gives a finer grained cake than coarse granulated sugar since it makes a better emulsion with the butter.

Milk is the usual liquid used in cake making. When water is used, less of it is required, for milk contains about 15 per cent solids.

Eggs are used to give richness and color to batter. Beaten egg whites assist in leavening.

Baking powder may be the tartrate or the phosphate types which call for a maximum of one and one half teaspoons per cup of flour, or the S A S phosphate type which calls for one teaspoon per cup of flour. In a batter using more than two eggs deduct one-quarter teaspoon of baking powder for each egg after the initial two.

Salt improves any cake, even the one containing butter.

Vanilla is the usual flavoring. There is no reason why others may not be used, nor why combinations will not be enjoyed.

Facts Proved by Research and Experimentation. Butter, when well creamed, gives a better cake than a fat with a higher melting point since the fats of this type harden when the cake is baked and cooled. Oils may be used, but the texture of the cake is more velvety when creamed, not melted, butter is used. Can you give the reason why? Cakes have better texture if all ingredients when used are at about room temperature.

When bread flour, instead of pastry flour, is used two tablespoons should be taken from each cup and two tablespoons cornstarch substituted.

In a given recipe the shortening may be increased one-quarter cup without serious consequences. Likewise sugar may be increased as much as one-half cup, but when this is done, the amount of beating should be increased. Increasing egg tends to make cake

rubbery and tough. Milk may be increased or decreased one quarter of a cup, where one cup is called for.

Instead of saying, "Mix cake for so many minutes," it is now customary to say, "When mixing cake, use so many strokes." For instance, a tartrate baking-powder cake is at its best when flour is put in with one hundred and fifty to two hundred strokes and an S A S phosphate-powder cake calls for two hundred and fifty to three hundred strokes. Too much mixing makes crust dull, smooth, and peaked, with tunnels in the crumb.

Cake batter which stands before baking develops different flavor and texture.

Methods of Mixing. First method is called the batter method. Sift dry ingredients; add well-beaten egg to liquid and melted fat; put liquids into dry ingredients.

Second method is called the creaming method. Cream butter; add three quarters of the sugar; cream well; add beaten egg yolks; add sifted dry ingredients and liquid alternately, starting with flour and ending with flour; fold in egg whites beaten and combined with the remaining sugar.

Third method has various names — "one bowl," "mix easy," and so on. Into lightly creamed hydrogenated shortening sift the combined dry ingredients, the unbeaten eggs, and half the liquid. After beating for a maximum of two minutes by machine or giving two hundred strokes, add the remainder of liquid and repeat the same amount of beating. Then pour the batter into pans. Baking proceeds as usual.

Putting Batter in Pans. Pans should be oiled, not buttered. Why? Pans may be lined with paraffin paper in addition to, or in place of, being oiled.

Film of oil may be covered with film of flour. After batter is poured in, lift pan about six inches from table and let it fall with a thud to table top. This breaks any large air bubbles which may be between batter and pan. It also breaks the tradition that cakes need to be handled as if they were new-born babies.

Baking. Have oven preheated to 375° F. for layer and cup cakes, 350° F. for loaf cakes. Put cakes on rack in oven placed about three inches from bottom of oven. If oven heats unevenly, turn pan occasionally so as to equalize exposure to heat.

"Done" Tests are four in number: Cake separates from sides of pan; cake tester, a clean toothpick, comes out clean when inserted into cake; cake springs back when pressed lightly with finger top; cake makes no sound when lifted to ear.

Butterless Cakes. Angel-food cake has risen to popularity within the last twenty years. Why it should be so universal a favorite and why so many girls and women should feel they are in heaven when their angel-food cake turns out tender, feathery, light, and snowy white is a question.

An angel food calls for egg whites only, a sunshine cake for egg whites and yolks in an unequal proportion — more whites than yolks; sponge cake calls for equal numbers of yolks and whites.

All three cakes use pastry flour, sugar, salt, flavoring. Cream of tartar is used in angel food to make cake whiter and more tender. Water, either hot or cold, baking powder, cream of tartar, or lemon juice are ingredients sometimes added to sponge- and to sunshine-cake mixtures.

Laboratories, test and research kitchens have put in many hours on work with angel food, discovering the following facts:

Facts Proved by Experimentation and Research. An egg white usually contains a thin, as well as a viscous, portion. The thinner portion beats up to greater volume. One teaspoon of cold water added to egg white when being beaten makes a more tender cake.

If egg whites are at room temperature when beaten, the volume is greater than when eggs are chilled.

An egg two or three days old is better than a freshly laid one for cake making.

Beating egg whites until dry and powdery is inadvisable since water has been lost in this process. The flour and sugar in the cake both need that moisture, which has been lost by overbeating. Also, overbeating gives a cake less volume. Underbeating may give a tough, rubbery layer at bottom of cakes.

Cream of tartar whitens the cake and makes baked cake more tender. Addition beyond the accepted amount makes cake tart and moist.

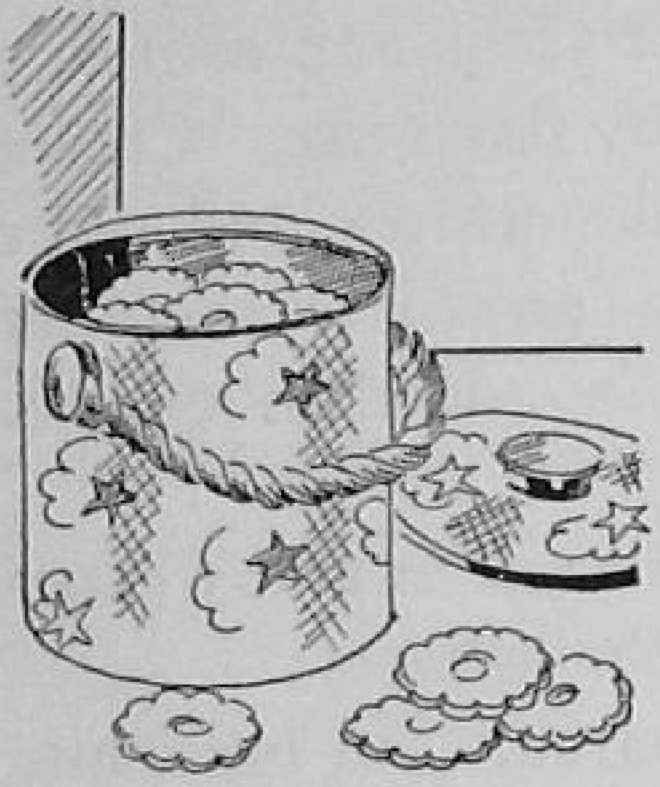
It is better in the creaming method to add sugar before flour; not to sift flour and sugar together and fold them in as one.

Folding the sugar in with sixty strokes gives a cake with best texture. Too much manipulation in mixing in the flour toughens the cake. There is no magic in many repeated siftings of flour and sugar.

Cookies

Friday afternoon in school used to be a gala affair when your grandmother was a little girl.

Clean white aprons were worn by the girls, clean blouses by the boys. "Pieces" were spoken to the admiring classmates. One "piece" which was popular started like this:



"I had such a wonderful, wonderful dream — a fairy took hold of my hand
And mounting a moonbeam she carried me off to far-away gingerbread land" —

Then came a description of the gingerbread houses, trees, and gardens. The fairy told the visitor she might have her choice of any of the gingerbread shapes, but trouble came. The visitor explained it:

"You see with such plenty on every hand I scarcely could make up my mind," — and then, tragedy on tragedy —
"Alas and alack, I awoke before I had taken a bite!
Oh! oh! if I only could take it again, that journey so pleasing and grand!
I surely would make better use of my time, in wonderful gingerbread land."

Gingerbread belongs in the small-cake or cookie class, at least as we make it in America. Dijon, France, is noted for its gingerbread, but to the American traveler it is a disappointment. Their product is really a ginger "bread" lacking richness, and flavored with anise. The crust is shiny and glazed, with no sign of richness within or without. Of course, what an American wants is a ginger "cake" rather than ginger bread.

In the land of cookies there are many varieties.

There are rolled cookies, dropped cookies, and cookies shaped

by packing them in a mold. This mold stays in a well-chilled place overnight. The unmolded chilled dough shape is cut into thin slices which are baked with no additional shaping.

Rolled Cookies. In this class belong the cookies which are made from a dough stiff enough to be rolled on a board. Unless the board and pin are adequately floured or are protected with a pastry cover, much flour is necessary to keep the cookies from sticking. Almost before you know it, the flour gets worked into the dough and soon there is so much flour absorbed that the finished cookie is hard and dry.

Overnight Cookies. To get away from the difficulty some bright woman said, thinking of her pie crust, "We chill the crust before we work with that and then we can roll it using less flour. Why could n't we chill the cookie dough?" And then she found, or a successor of hers did, that the dough became so chilled and firm that she could slice off thin rounds from the roll and bake them just in that shape. No rolling on a board was necessary. She told her neighbors. Doubtless, some neighbor's husband was an inventor and he said, "Hum, why don't we make that mold in which you put the dough to chill in the shape of a heart, or a club, or a spade, or a diamond?" That worked out successfully. Now cookies are shaped while they are chilled and lo! — we have the overnight cookie.

No one has yet found a way to pack ginger cookie dough into a mold shaped like a gingerbread man, so those cookies still have to be rolled and cut in the old-fashioned way.

Drop Cookies. Dropped stitches are mistakes — so are dropped "h's" — but dropped cookies are a grand invention! After all, a cookie is eaten in a very short time. Why spend hours standing over a pastry board rolling out a mixture, cutting and shaping it, baking it with care, and then seeing it vanish "quick as a wink" to satisfy the never-ending appetite of the cookie lover?

Because the dough does not have to be rolled and floured to prevent sticking, the dough may be kept softer and richer. Dropped from the tip of a spoon, shaped after the mound is on the board by the twirling of the bowls of two spoons about the dough, gives a satisfactory cookie.

Cookie dough spreads under the action of oven heat which melts

some of the shortening, so it is wise to keep the mounds far enough apart to prevent them running into one another. Two cookies which have run into one are like two girls who try to do everything in the same way until each girl loses her own identity. Being friends is fine, but losing every bit of individuality in the process does not give pleasing results.

Macaroons, Meringues. Egg whites beaten until stiff, sweetened with sugar, and possibly increased in bulk by the addition of ground or macerated nut meats or crisp cereal give us a macaroon. Does the use of that word "macerated" give a clue as to the derivation of the name for the small sweet?

Omitting the nut paste, adding some flavor, such as lemon juice to give flavor and to stiffen the albumin in the egg white, gives a mixture which may be put through a pastry tube or shaped with spoons held in deft fingers. The results are meringues or meringue shells.

Baking both macaroons and meringues is really a process of slowly drying them out. Any albumin toughens and shrivels under great heat. What is medium heat for a regular cookie is altogether too great for an egg-white mixture. Professional bakers, trained to use the old immense ovens with stone floors heated by the burning of charcoal within them, used to use the last remaining bit of heat in the cooling stones to dry out or bake their macaroons and meringues.

In modern times we approximate their cooling stone-oven floors by using a board, which is a poor conductor of heat, covering it with paper, and then putting the meringue drops on that. The oven flame is as low as we can get it. Meringues require almost an hour's slow baking.

The result is really a sweet white ring or drop which on being broken proves to be powdery.

Meringue shells are sometimes used as holders for ice cream or fresh fruit.

They may be filled with sweetened whipped cream. They give a party air whenever served, and give the person who eats one heart failure because the spoon may glance off the hard crust and force the shell to rise in the air, falling on the tablecloth or on one's own or a neighbor's party clothes.

Whether popular favor calls them kisses because of this explosive effect or because of their sweetness, is something for you to mull over!

CLASS ACTIVITIES

1. Plan a menu for a lunch in which pie is used as dessert; one in which chocolate cake may be used.
2. Plan a meal at which you may use angel-food cake.
3. Calculate the cost of a loaf of home-made bread; a pan of home-made rolls. Decide when you think it might be wise for you to bake bread for your family.
4. Work out a type recipe for a butter cake. Plan as many variations as you can find.
5. Calculate the cost of the pastry and cakes you make in the food laboratory.
6. Use commercial mixes for some baked products. Compare the products as to cost and flavor with those which are home mixed.
7. Take orders for fruit cakes and nut bread before a holiday. Make these in the school kitchen. Calculate the price at which you must sell these to make a fair profit.
8. Pack a box of cookies as a gift for some girl or boy who may be away at college.
9. Visit a bakery. Price the cakes and pastry.
10. Make a score card for judging the products prepared in class.
11. Give a special report in class on a magazine article on baked products.

TEST: Standards in the Appearance and Taste of Some Baked Products

Directions: Choose the phrase or phrases which describe to you how a standard or good baked product should look and taste. List these correct answers on a sheet of paper.

1. Good bread should have
   a. a nutty flavor
   b. a light brown crust
   c. a creamy or colored crumb
   d. large air holes
   e. an even grain

2. A good butter cake should
   a. be fine grained
   b. feel firm to the touch
   c. have a decided flavor
   d. feel velvety to the touch
   e. be coarse grained
   f. be tender and fluffy
3. A good sponge cake should
   a. be tough
   b. be fluffy and fine grained
   c. be dry
   d. have a sugary crust
   e. be golden yellow
4. Good pastry should
   a. be firm, not easily broken
   b. be a very light brown
   c. be flaky and tender
   d. have a soft under crust
   e. be light
   f. have a pleasantly sweet and spicy or tart filling
5. Good cookies may
   a. be crisp, soft, or spongy
   b. have a good flavor
   c. lack uniformity in size and shape
   d. have a tendency to crumble

Desserts Using Gelatin

Gelatin has an unsavory past, but is so refined and purified to-day that it bears slight resemblance to the sheets of rather odorous tough stuff that used to be required for making calf's foot jelly. With your knowledge of gelatin's ancestors, it ought to be easy to decide why that name was used.

When sea-faring folk could not get gelatin, they used to gather Iceland moss, a seaweed that has jellying powers when put into warm milk. The resultant milk jelly had a flavor slightly acrid, reminiscent of sponges, but it was n't bad, at that.

Now gelatin adds no flavor, no odor, no color to mixtures, but does change them from liquids into quivering masses of goodness.

To get that goodness, of course it is necessary to add fruit juices or other flavorings and sugar to the liquid.

The simplest gelatin dessert is made with boiling water into which has been put a commercially prepared combination of gelatin, fruit flavor, and sugar. Or equally simple, the fruit juices and sugar from one's own pantry may be added to the dissolved gelatin.

"Simplest", in the above sentence, refers to the fact that the gelatinized mass is allowed to "set" with no disturbance. It is of the same appearance, character, and consistency throughout.

These fruit-flavored gelatin mixtures may have fresh or canned fruits added to them.

Take that same mixture and beat it with an egg beater when it is of the thickness of molasses and you get a whip. Or add unbeaten egg white to the thickened gelatin and beat that in and you have a snow. All you have to do is to look at it to guess why it is called snow.

If, by any chance, you have used cherry, strawberry, red raspberry juice to give the fruit flavor and you beat the mixture, you get a pink snow.

Ripe sliced bananas may be beaten in with the egg white or folded in after the beating is complete. Then you have a banana snow.

Bavarian Creams. According to most of the photographs of Bavarian men and women, they are pleasingly plump. That may be because they like good food. It may be, too, that they have a special fondness for whipped cream. At any rate, gelatin desserts in which whipped cream plays a prominent part are called Bavarian creams.

To make them, the gelatinized mixture, usually a fruit flavor one, although it may be a sweetened milk one, is allowed to set quite firmly. Then whipped cream is folded in and the smooth rich mixture is allowed to get firm but not stiff. To-day the Bavarian cream is found as a filling for baked pie shells and is called chiffon pie. It has something of the airy fairy lightness of sheer chiffon.

In some Bavarian creams there is not only the richness of the whipped cream but also that of eggs and sugar. Is it any wonder the Bavarians — well, is it?

Ice Cream

Whether it be true or not that Dolly Madison gave Americans their first ice cream, we may rest assured that its use will be discontinued only when the last inhabitant answers the trumpet call on Judgment Day.

Ice cream is America's most popular dessert. Time was when pie ranked first, but no more. Some people play no favorites, but take both pie and ice cream. No praise is forthcoming for such a practice, however, since both pie and ice cream are rich in calories. Figure them for yourself and then consider your figure!

Some people like the "coolth" of frozen desserts. Others enjoy the flavor or the sweetness. And some don't analyze why they like them — they just do.

Years and years ago a frozen dessert was simply made — freshly fallen snow was mixed with sugar and a trace of vanilla.

And long, long before that the Arabs took the snow on the high mountain tops, blended it with fruit juices, and made a "sharbat", which has become the French "sorbet", the Italian "sorbetto", and the American "sherbet."

Before we discuss the methods of freezing, suppose we list the varieties of frozen desserts.

First and simplest, — water, sweetened and flavored with fruit juices and called water ices.

Next come the frappés, which may use water, cream, or milk well flavored, and frozen until of a semi-liquid consistency.

Sherbets are third. They call for a water or milk ice to which a small amount of hydrated gelatin or beaten egg white is added. The white is beaten in after the mixture is half frozen.

Granites are water ices to which a fruit pulp has been added. The mixture is frozen as for a frappé. The particles of fruit give a rough, granite texture.

Cream or a soft custard to which sweetening and flavoring is added makes either a Philadelphia or a French ice cream. The custard is the base for the French.

Next come the mousses, so named because they have a mossy-like texture. This is obtained by beating cream, folding in fruit purée, and sweetening. The fluffy mixture is frozen without agitation so that the mossy texture is maintained.

Richest of all are the parfaits made by beating egg whites into a hot sweetened mixture and then folding in whipped cream.

Bombes are a combination of two creams, or an ice and a parfait, or an ice and a mousse, or an ice and a cream. The mixture is packed and frozen without agitation in a melon-shaped mold. The ice lines the mold and the rich mixture is in the center.

Sundaes and sodas are American in origin. Both use ice cream as a base. Sundaes add a rich syrup and nuts, cherries, fruits, seemingly everything that has a few calories. Sodas use ice cream, syrup, and a charged liquid.

Desirable Factors in Frozen Desserts. Good appearance, firm but not rock-hard texture, pleasing flavor, are essential in a good frozen dessert. Even the frappés and granites have a certain firmness. Slippery smooth ice creams are not desirable. Too heavy a custard or too much filler — it may be gelatin, it used to be lard — give that slippery texture.

Since frozen mixtures dull the taste buds on the tongue, it is necessary to make a mixture too sweet and highly flavored before freezing to obtain the right degree of flavor after freezing.

Frozen creams which have mellowed by standing for a few hours are better in flavor than freshly frozen ones.

The use of dry ice for packing around frozen creams is becoming prevalent. It has many good points. The dry ice is compact, not messy, and has a five- to ten-hour lasting quality. It keeps foods frozen so hard that unpacking at least one and one-half hours before serving time is to be recommended.

Methods of Freezing. Until the advent of the mechanical refrigerators, there was little question as to the method of freezing. Mousses and parfaits were frozen without stirring, in order to keep the fluffy texture of the cream intact. But ices, sherbets, and creams were frozen by turning a dasher which fitted in the cylinder into which the liquid had been poured. Surrounding this metal cylinder was the brine made from the melting ice and the salt. When the dasher turned so hard and stiffly that only big

brother or your strong-muscled basketball arm could turn it, the ice cream was frozen. It had gone into the can a liquid. It came out a frozen, rather solid mass, whiter in color, and quite velvety in texture.

There were a number of messy operations connected with ice-cream making. It was hard to find a gunny sack or container which would hold the ice as you slashed down upon it with hammer or flat side of the hatchet. Usually you poked a few holes in the ice bag. Then the floor became wet and slippery. Usually the ice-cream salt spilled on the floor. That added to the mess. Then after the ice cream began to freeze, a dirty brine escaped from a hole bored in near the top of the wooden tub. More of the brine escaped as the tub was repacked. Oh! yes, we almost forgot to mention that so much ice cream adhered to the dasher that some of it dropped onto the salty ice, and occasionally the brine seeped into the freezer after the cream was repacked.

But at that, the ice cream was so good that Mother swallowed her objections and usually agreed with you when you said, "Oh! mother, let's make ice cream."

However, labor-saving devices which had been coming into the home found their way into ice-cream making. First, we had a so-called vacuum freezer. It was a light-weight tin affair, one cylinder enclosed within another. Into the inner one went the mixture to be frozen. Into the outer one or jacket went a mixture of finely cracked ice and salt. The can was set away for a half hour. Then it was opened and the contents of the inner can were scraped away from the sides where freezing had begun. After a half hour, the interior was scraped again.

The device was quite successful. It was not very messy. It called for no strong-armed Katrinka to turn the dasher. But the frozen mixture was rather granular. Velvety ice cream comes only when the mixture holds in suspension a large number of small air bubbles, and these come from beating.

If there was no agitation while the mixture froze, the air bubbles were not broken into tiny ones. And the large amount of water which was in the mixture (there is water in milk, in cream, in fruit juices, in fact in all but the sugar which goes into ice-cream making), froze into unpleasant masses of ice. Of course, there

was nothing else for it to do. And who wants to eat granular ice when they are all prepared for a velvety cream? But by beating the mixture and scraping it down frequently, a fairly satisfactory result was obtained.

We might have gone far with the vacuum freezer, but just about that time the mechanical refrigerator began to enter homes. Some woman said, "Well, if that ice chamber freezes ice cubes, why won't it freeze ice cream?" She put the mixture in and it froze. She must have been the wife of an up-and-coming refrigerator salesman, or of an advertising man who handled a refrigerator account, for the idea caught on like wildfire, or had we better say like a wild blizzard or ice storm?

Every salesman talked frozen desserts made in a mechanical refrigerator. Every woman said, "At last, my family may have all the ice cream it wants. We can make it without any mess of cracking ice; with no salt, no brine, no turning of a crank, no repacking. Hooray! the millennium has come."

But, sad to relate — it had not.

Women tried to use the recipes they had employed so successfully in their dasher freezer and the result in the iceless was a hard, icy, granular mass. Or they tried to freeze heavy sweet mixtures and the dessert never did freeze.

Mechanical refrigerator salesmen had oversold women on the idea of making frozen desserts at home.

Something had to be done. It was. The companies set trained experimenters to work. And now we know what we must not do in order to get good desserts.

It is still true, and will be until something new is evolved in iceless refrigerators, that a plain fruit ice cream is better and smoother when made in the old-fashioned way than when made in the iceless or mechanical refrigerator.

Since the above statement was written, something new has been evolved. It's a device that works electrically and beats the mixtures in the freezing trays. But it works only at below-freezing temperatures.

But we have talked long enough. Let's get down to work.

Dasher-Freezer Ice Cream. Use the proportion of eight parts cracked ice to one of salt. Even a lower percentage may be used,

but it slows up the freezing too greatly. We used to say three parts ice to one of salt. Have the mixture cold when it goes in. In a warm mixture the agitation before the freezing starts may turn the rich cream to butter.

Do not have too rich a mixture, as the fat in the "mix" hardens at the freezing temperature. Therefore, we get a hard ice cream. Ordinary coffee cream will be best. Do not use whipping cream.

This is especially true if the freezer is turned electrically. Here a hard, dry texture results if cream is too rich or first agitation is too rapid. Turn slowly until mixture is well chilled.

Too much evaporated milk gives a grainy, almost sandy, texture.

Allow plenty of room for mixture to expand during freezing. It is best to fill the freezing can two-thirds full.

After the mixture is frozen, remove the dasher. Repack the freezer. Do not empty out the brine. Instead, pack in ice which will crowd out a certain amount of brine. Before adding fresh ice, sprinkle salt over that remaining in freezer. Then repack, using eight parts ice to one of salt. The ice and salt may be mixed in a large container, say a dish pan, and then packed into the freezer.

Allow at least an hour for the ripening of the frozen cream.

Mechanical-Refrigerator Ice Cream. Now for mixtures frozen in a mechanical refrigerator.

First: learn which tray in the refrigerator is the fastest freezing one. Start your freezing in that one. Frequently a small amount of water placed on the floor of the freezing compartment before slipping in the tray will aid in quick freezing. We want quick freezing in this modern way of making ice cream.

Second: since only a limited amount of agitation should have to be given a dessert frozen in this energy-saving way, it is necessary to incorporate air into the mixture before it is frozen. It is necessary to make the air bubbles small. This is accomplished by incorporating whipped cream, whipped, condensed, or evaporated milks, or beaten egg whites.

To be sure that the beaten-in air stays in the mixture, it is best to use something like marshmallows, thick custard, sweetened

condensed, or evaporated milk. Each one of these has a rather heavy tenacious body which holds fast to air beaten into it.

Third: the sweeter a mixture, the lower is its freezing temperature. Therefore, it is unwise to try to freeze heavy syrupy mixtures.

Fourth: in these desserts cream must not be whipped until it is too stiff. When it holds its shape, just that and no more, it is beaten sufficiently.

Fifth: since the early freezing helps to hold in air bubbles, it is wise to have mixture well chilled at the start. There is less warm temperature to be removed in the freezing unit before freezing starts.

Sixth: it is wise to fill trays no more than three-quarters full. And, also, to remember that the freezing space is small and that it must not be loaded with more than it can take care of adequately.

Seventh: sherbets, creams, everything but mousses, must be stirred down at the end of the first half hour. Another stirring must be done within thirty minutes. Then the sherbets may be removed from the fastest freezing space and allowed to ripen.

Eighth: at the end of the first half hour the cream mixtures should be stirred and scraped from the bottom of the unit. At the end of an hour the mixture should be emptied into a well-chilled bowl and beaten vigorously. Stirrings should recur at half-hour intervals for two hours. This explains why trays should be filled no more than three-quarters full.

Ninth: and this rule applies to dasher-frozen creams also — foods such as fruits, chicken, vegetables incorporated in the mixture should be in small pieces. A cherry will freeze into a solid ball, a wedge of pineapple will get hard as a rock. The large amount of water in the fruit is the explanation, of course.

It seems foolish, in a way, to spend so much time discussing home-made frozen desserts when there are good and inexpensive commercial ice creams as close to you as the corner drug store or your grocery. Dry ice facilitates both the delivery and the keeping qualities of the ice cream.

The telephone makes almost any store a corner or neighborhood store.

But the home-made creams may have the individual touch, just as do your jams, jellies, conserves, fancy yeast breads. We should know how to make them.

In the back of the book you will find "pattern" recipes using marshmallows, tapioca, and evaporated milk. From these you should be able to work out your own recipes.

Remember sweet heavy syrups will not freeze. It's difficult to get a good maple parfait, for that reason, in a mechanical refrigerator.

But the freezing unit will do the nicest things for you in the matter of decorative ice cubes. Ginger ale, lemon or orange juice and water when frozen make flavorful cubes to go into punches and iced tea.

Cherries, mint leaves, wedges of lemon, a violet, or rose petal may be frozen in the cubes.

The water may be colored green, pink, orange.

Large glass fruit bowls built on the principle of an inner bowl holding fruit, say red raspberries or peaches, have faintly pink or green ice cubes in the outer glass jacket. The effect is pleasing.

Set your imagination to work. There are many frozen possibilities — make them "frozen" assets that are unlike their bank cousins — enjoyable, easily obtainable.

CLASS ACTIVITIES

1. Plan a series of dinner menus to be served in class. Consider these menus in the light of the discussion in this chapter. Decide on the cost to which you will be limited. (Do not let these meals cost on an average more than your meals do at home.)

Plan six meals, using a different meat in each meal. Include one or more vegetables (one of which may be served as a salad), bread and butter, perhaps a dessert, and a beverage.

2. Prepare these meals in the same way you did your breakfasts and luncheons, making a study of each new food to be included in the meal.

You may need to practice the preparation of some of these foods.

3. Make a table of foods that are particularly nice when served with the different kinds of meats, thus:

MEAT	SUITABLE ACCOMPANIMENTS
Pork	Sweet potatoes
Beef	
Veal	
Lamb	
Mutton	
Chicken	
Fish	

4. Plan two dinners that would be suitable for your family at home.

5. Ask your mother to let you do the buying of meat at home until you have become familiar with the various cuts and their uses.

6. Perhaps the class can visit a meat store in the neighborhood and have the butcher give a meat-cutting demonstration for you.

7. If there is a meat-packing house in your neighboring city, you might like to visit it also.

8. As a home-project plan, prepare and serve at least ten dinners to your family.

PROBLEMS

A. Mr. Jones works in a downtown office. He eats a light breakfast and buys a sandwich and a milk shake downtown at noon. Marie and John, who are in high school, eat at the school lunch, where they may procure sandwiches and hot soup at noon. Mrs. Jones lunches by herself at noon, so eats very lightly. Her club meets on Friday afternoon, so that she does not get home until 5 P.M. The family generally eat their dinner at 6:15 P.M. Her menu last Friday was:

Fried ham   Eggs
Bread   Butter
Canned peaches
Cookies

Is this a suitable dinner? Give reasons for your answer. If you do not consider it good, change the menu, making it more suitable for this family.

B. Both Mr. and Mrs. Johnson are employed during the day, since Mrs. Johnson acts as Mr. Johnson's secretary. They have no children. They eat a light lunch downtown at noon. They arrive home about 5:30 P.M. They plan to eat their evening meal about 6:30 P.M. Mrs. Johnson has planned the following dinner for tonight:

Breaded veal — Baked potatoes
Creamed peas
Apple and celery salad
Lemon soufflé — Coffee

What do you think of the suitability of this dinner? What will be Mrs. Johnson's greatest difficulty? Why? Can you suggest any solution for this difficulty?

C. Mr. Powell is a farmer. His family consists of his wife and three children, John, Ralph, and Louise, ages 7, 9, and 11 respectively. The children carry their lunch to school. Mr. and Mrs. Powell eat a rather heavy meal at noon, consisting of meat, potatoes, white bread, pickles, and coffee. Mrs. Powell served this dinner one night last week:

Beef stew with potatoes and carrots
Bread — Butter
Apple pie — Tea

What do you think of this menu? Would you change it? Why? How?

TEST: *Application of Knowledge in Buying of Foods for Dinner*

Directions: Choose the statement or statements which complete the sentence correctly. Write your answers on a sheet of paper or in your notebook.

1. In choosing poultry, pick a bird which
   a. is plump, with a clean, unbruised skin
   b. has long thin legs and wings
   c. has flesh which is tender and elastic to touch
   d. has a coarse flesh
2. A young fowl has
   a. a smooth skin dotted with pin feathers
   b. a rough skin with long hairs

c. soft feet and legs with small leg scales and sharp toe-nails
d. a hard tough bone-like keel or end of breast bone

3. In buying vegetables, one should
   a. buy by measure such as peck or bushel
   b. buy by weight
   c. choose firm, tender, green vegetables
   d. be sure that vegetables are not quite ripe
   e. save money by buying wilted or speckled vegetables
4. If one wants to secure good beef, one should be sure that
   a. it is bright red in color, with bones very white and ivory-like
   b. the lean is firm and well marbled with fat
   c. the fat is slightly pink, soft, and evenly distributed on the outside
5. In order to obtain good veal, choose meat that
   a. is almost white in color with faint pinkish tinge
   b. has a creamy white fat mixed with it
   c. has strong, brittle, yellow bones in it
6. Good pork has
   a. lean which is fine grained and firm, almost white in young animals, tinged with pink in older animals.
   b. soft porous bones
   c. pinkish tinged fat, very firm
7. Good bacon should have
   a. an appetizing, strong smoky odor
   b. a thin skin which is smooth, light colored, and free from blemishes
   c. more lean than fat in it
   d. a coarse-grained rough texture
   e. oily, flabby fat mixed through it evenly
8. In order to secure good fish, one should look for
   a. a firm elastic flesh in which finger impressions will not remain
   b. a fish with a dull skin and loose scales
   c. yellowish gray or brown gills
   d. clear eyes, not sunken or wrinkled
   e. a fish that will float on water

TEST: Your Knowledge of Terms Used in Foods

Directions: Below are several definitions or descriptions of terms used in foods. On the left-hand side of the page is a lettered list of terms arranged in alphabetical order so that they may be quickly found. On a sheet of paper write the numbers one to eighteen; these numbers correspond to the definitions given. Read each definition or description, decide what term it is, find the term in the list, and write its letter in the space on your paper after the number of the definition.

TERMS USED IN FOODS

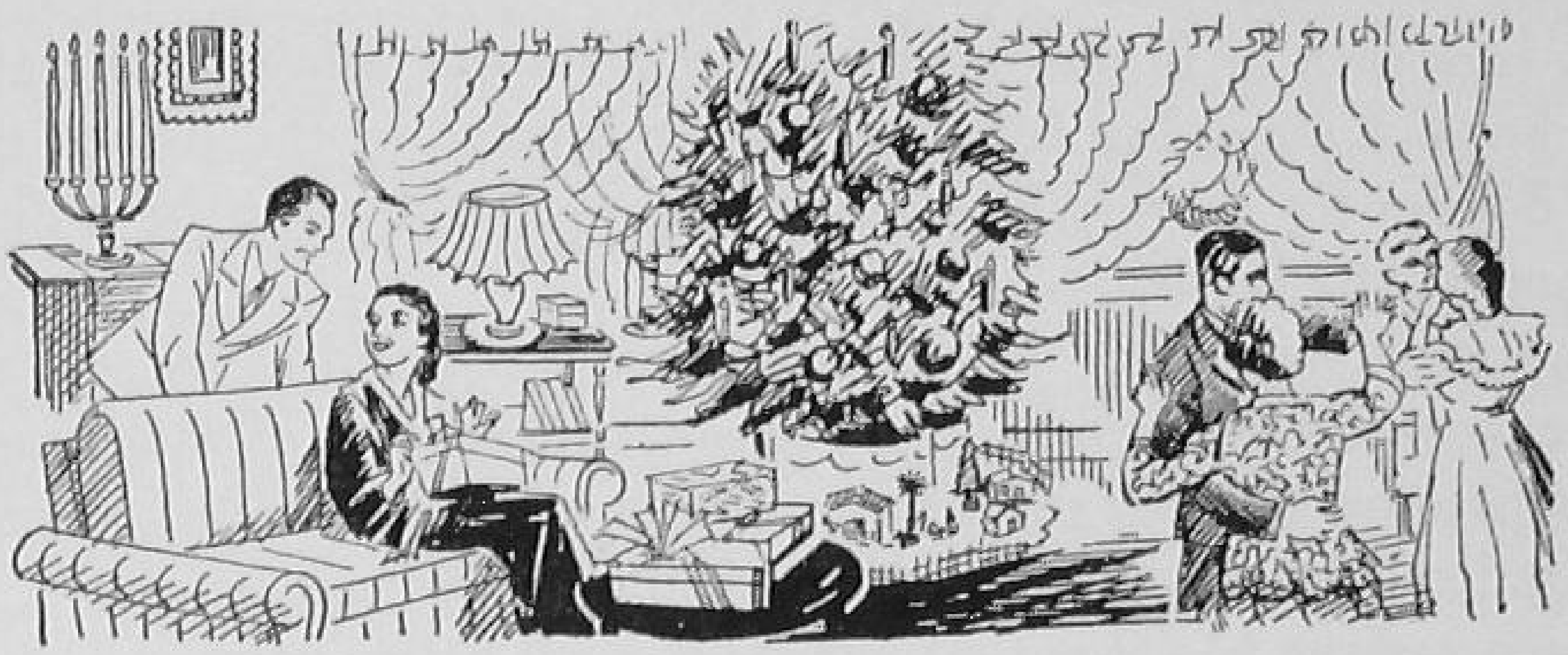
a. Bran
b. Broiling
c. Calorie
d. Course
e. Cover
f. Chuck
g. Gelatin
h. Gluten
i. Menu
j. Myosin
k. Patent flour
l. Pectin
m. Porterhouse steak
n. Pour batter
o. Quick bread
p. Rennin
q. Roasting
r. Soft dough
s. Soufflé
t. Stiff dough
u. Vitamins
v. White sauce

DEFINITIONS

1. Flour made from the middling of wheat
2. A baked dish similar to an omelet, in that it is made light by the use of stiffly beaten egg whites
3. A protein insoluble in cold water, dissolves in hot water, thickens when cold, used as a basis of desserts
4. Cooking over glowing coals or directly under the gas flame
5. A tough cut of beef
6. Dough containing 4 parts of flour to 1 part of moisture
7. The thinnest bread mixture
8. A tough elastic substance produced by a mixture of wheat proteins with water
9. The outer coat of the wheat grain
10. Bread requiring a shorter time than yeast bread for baking and preparing
11. A list of foods forming a meal
12. A unit of heat measurement
13. The linen, glassware, silver, and china that are placed on the table for each person when the table is set
14. The jellying substance found in some underripe fruits
15. Substances necessary for health and growth
16. Dough containing 3 parts of flour to 1 part of moisture
17. A tender cut of beef
18. An enzyme found in the gastric juice

UNIT 5. FOODS FOR SPECIAL OCCASIONS

Holiday Meals



New Year's Day is celebrated by "open house" when something to eat and drink is offered every caller who comes to make a New Year's Day call. In looking up holiday customs we find that many of them were celebrated by pagan people and that the Christians took over the customs and the food, but gave the holidays a new significance. There is fascinating reading about the holidays to which we now give a religious significance, Good Friday, Easter, Christmas.

Not only do we have certain foods associated with these days but we have colors as well — Valentine's Day is red and white or pink and white. St. Patrick's Day is green and white. The Fourth of July should show red, white, and blue. Thanksgiving and Halloween both use the tawny autumn shades with pumpkins, autumn leaves, and ears of golden corn playing a large part. Christmas is holly red and green.

Since these are the accepted decorations, it is wise to use them in planning both foods and table decorations.

There are times when crêpe paper may play an important part in decorating party tables. When the spirit of the party group is one of riotous fun, as at Halloween or April Fool's Day, then paper may have a place. But care must be taken lest that irresistible impulse to use "just one more piece" of it be not curbed. Crêpe paper in the hands of some amateur decorators is like parsley in the hands of some zealous cooks. If a small piece of parsley looks well on the Sunday night platter of cold meat, then another piece will add to the effect, says the cook, and so it goes until the meat

has a whole parsley hedge surrounding it. An artist would have used restraint and put a large sprig here and a small sprig just for accent there and said, "It is finished."

A luncheon or dinner party is not a riotous affair. Therefore, the hostess plans her color scheme to appear in the dishes used, the flowers for centerpiece, the candles — if the affair be a dinner — and in the bonbons.

A hostess may say, "My color scheme is red and white so I shall have tomato soup with whipped cream, rare roast beef with mashed potatoes and strips of pimiento, radishes and celery, candied apples colored red for salad, red gelatin, white cakes iced in red." She is such a slave to color that she must wish coffee were red. And surely she will feel that the sugar passed for the coffee must be crimson or scarlet.

Such a meal may adhere strictly to a color scheme, but it consists of bad food combinations and such a monotonous repetition of the red and white that her guests must be saying, "Methinks the lady doth protest too much." At Halloween, April Fool's Day, St. Patrick's Day, when entertaining is gay and inconsequential, such close adherence to color schemes may be all right, but not for really nice meals.

Let's run over, mentally, the various holidays to see whether each holiday does not have some good foods belonging especially to it.

New Year's Day — we celebrate with "open house" and serve buffet refreshments; Birthday — birthday cake; St. Valentine's Day — heart-shaped sandwiches, molded dishes, ice creams, and cakes; St. Patrick's Day — emerald-green salad, shamrock-shaped sandwiches and cakes; Easter — Easter eggs, ham; Decoration Day — first out-of-door picnic; Fourth of July — salmon, new potatoes, green peas (menu followed in eastern part of United States); Labor Day — last out-of-door picnic of the season; Thanksgiving Day — roast turkey, cranberry sauce, pumpkin pie; Christmas — roast goose, apple sauce, mince pies, suet pudding, Christmas cookies, and cakes.

Then there are special days usually observed in the Church calendar: Fast days — fish; Shrove Tuesday — pancakes; Good Friday — hot cross buns; Ash Wednesday — saffron cakes; Twelfth Night — twelfth-night cakes.

In the secular holidays we find Halloween — cider and doughnuts.

Holidays are either holy days or folk days. Tradition has built up certain observances. Decoration Day, Fourth of July, Labor Day, and Thanksgiving Day originated in the United States and have comparatively little tradition attached to them.

New Year's Day. Suppose we were having "open house." By three o'clock the family would be dressed ready to receive callers, the fire in the living room would be crackling noisily, and in the living or dining room there would be a table set with Mother's party tablecloth. A vase would hold flowers. There would be plates of small cookies — Christmas ones are best and a bowl of fruit punch, possibly eggnog, as well as the cups and saucers for hot tea or coffee.

The hot beverage would be made in the kitchen, unless Mother uses her family heirloom silver service, or her amusing provincial pottery set. The teakettle would be kept boiling to make fresh tea for newcomers. It might easily be that a powdered coffee is used in making cups of fresh amber brew. Guests might come and stay for fifteen minutes, or they might linger long, but the hail and farewell would always be the same "Happy New Year to you!" In England little boys and girls used to go singing from house to house. Their ditty ran like this —

God bless the Master of this house, the Mistress also,
And all the little children that round the table grow;
Likewise young men and maidens, your cattle and your store,
And all that dwell within this house we wish you ten times more.

Please good missis a soul cake,
A soul, a soul, a soul-cake,
An apple, a plum, a pear or a cherry,
Any old thing to make us all merry;
One for Peter, two for Paul,
Three for Him who made us all.

The lanes are very dirty, my shoes are very thin,
I've got a little pocket to put a penny in;
If you have n't got a penny, a ha'penny will do,
If you have n't got a ha'penny it's God bless you!

Please good missis a soul-cake, etc.[1]

[1] "The Gourmet's Almanac," A. R. MacDowell. Covici Friede, Inc.

Valentine's Day. A luncheon, an afternoon party, a dinner, or an evening affair are all possibilities for this holiday.

Suppose we plan a luncheon which you will give to five of the girls in the class.

Pink and white are our colors. Pink and white carnations or tulips are the flowers.

The hour of the luncheon is half after twelve o'clock.

Since this means we have daylight, we use no candles. But at each place we have a little pink tray which may be procured at a "dime store." This tray adds to the table decorations and may be used later by the girl in her own room to hold clips or odd bits of jewelry. We are not selecting favors which cost money and time and which have no real use. Such a procedure does not seem like good sense. There are too many useless party contraptions which are taken home, kept until they become dust catchers, and finally thrown out. They clutter the market. Let's let them continue to clutter the market and not the party table.

Here is the menu:

Chilled cranberry juice in small glasses
City chicken Creamed potatoes Spinach
Heart-shaped bread-and-butter sandwiches
Love-apple salad
Strawberry gelatin Heart-shaped cookies
Chocolate

After luncheon the girls may make old-fashioned valentines (you can buy the "makings" in the shops), play "hearts" or "Old Maid", and charades.

St. Patrick's Day. On this holiday we may have an evening party at home with some of the boys and girls in as guests.

They may be asked to come prepared to tell an Irish story or dance an Irish jig. Carving an Irish potato to represent one of the most famous characters in the land of story-telling, "ould Pat", is good party fun.

The decorations will be in green and white. Possibly you can get some real Irish shamrock. If not, there are infinite possibilities in crêpe paper. Harps, plug hats, and clay pipes belong to this holiday.

At about ten thirty you serve the refreshments. Suppose we

have the guests go to the dining room, where the food is arranged on the table something like a cafeteria counter. Each guest takes a plate and silver on his tray and selects his food.

Potato salad
Minced ham sandwiches Celery Olives Pickles
Ice cream with green garnish (Crème de menthe cherries or Emeralettes)
Plain cake cut in the shape of shamrocks and iced in white
Pale green punch

Easter. Easter is the day when the family has an especially good dinner. But Easter is also the day when all the family goes to church. That means we need to work out a menu which won't keep Mother, or you, at home working in the kitchen.

Clear soup (use the commercially canned) printanière
Baked ham Creamed potatoes Celery au jus
Pickled peaches or spiced prunes
Bread Butter
Daisy salad
Lemon snow Butterscotch cookies

The soup which is chosen is known as a spring soup. It has match-like strips of vegetables in it with a few new peas for good measure.

The ham may be served hot or cold. In either case it is cooked on Friday or Saturday, cooled, coated with the brown-sugar cracker-crumb mixture, and studded with whole cloves. If you want to serve it hot, put in the oven for three quarters of an hour after returning from church.

The potatoes are peeled before going to church. After they are cooked a thin cream sauce is poured over them. A few flecks of parsley make them look quite festive.

The celery may have been cooked on Saturday.

The salad is made of hard-cooked eggs, cutting the whites into lengthwise eighths, arranging them as petals radiating from a center made of salad dressing with sieved hard-cooked egg yolk over that.

The lemon snow is made on Saturday and put in a cool place The cookies are baked on Saturday. It is true that this dinner means work for Saturday, but that is proof of the truth that you

can't get anything worthwhile in this world without paying for it. Work on Saturday and you may rest on Sunday.

May Day. Really we should have a gay breakfast on May Day morning. Possibly ten girls will sit down to a table decorated with a basket of spring flowers or a miniature Maypole with bright ribbons leading to ten boutonnières, one for each guest.

For the breakfast let's have —

Canned grape fruit juice, chilled
Scrambled eggs Crisp sausages Quarters of small tomatoes
Toast Marmalade Hot beverage

Decoration Day. Dare we plan for a picnic on this day? The first picnic of the season!

We'll get in the family car and take our filled basket with us. A bag of charcoal to aid the rather damp wood and a grid with pointed metal legs which penetrate into the ground easily are good for a picnic so early in the season. Later in the season it will be easy to find dry wood for fires.

Suppose we have —

Bacon broiled over the fire
Buns Some of Mother's cucumber relish
Crisp lettuce to be eaten after rolling and dipping in salt
Wedges of cheese Apple turnovers
Coffee

(We know girls your age are n't supposed to know anything about the flavor of coffee — but what's a picnic without coffee for folks as old as you, that is.) Young sister and brother still have cocoa or milk.

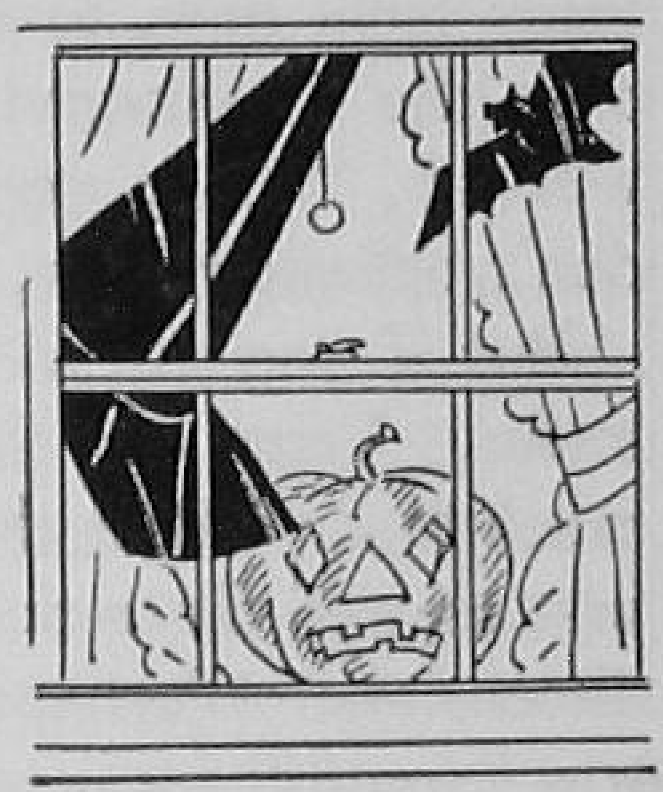
Fourth of July. This is the day for boiled salmon, new potatoes, peas, and watermelon.

Suppose you can't get the fresh salmon, then what?

You might put a can of salmon into boiling hot water and keep it there for a half hour. Then open, drain, and put at once on a hot platter.

Fourth of July is apt to be a rather disrupted day, like exploding fire crackers or sky rockets, with the family all going off hither and yon. Suppose we leave the day's dinner as we have suggested and let it go at that.

Labor Day. Decoration Day ushered in the picnics and Labor Day usually says farewell to them. Here is your chance to have a corn roast with broiled steak fingers cooked over the fire, potatoes, like the corn, roasted in the embers. A thermos jug of creamed potatoes may be substituted for the roasted ones, but with plenty of buttered buns they really are superfluous. Home-grown juicy tomatoes, watermelon, or fruits like grapes, peaches, and plums, give you as much food as you need.



Halloween. Suppose the church society wanted to have a Halloween party. The young folks may meet in the church parlors or in your home.

Traditional games that show you your future, pairing off of couples, and paring of apples all belong to this mystic eve.

Food might well be cider, doughnuts, or pumpkin pie. Since witches are supposed to be abroad, you might add sandwiches, although they are not needed. Most people eat just as much supper or dinner before they go to a party as they do on a stay-at-home night. Why then should a hostess assume that her guests come to her starved and famished for food?

Thanksgiving.

> "Over the river and through the wood
> To grandfather's house we go."

Thanksgiving Day is one of the nicest in the whole year. The family, even unto the third and fourth cousins, meet under one roof and partake of the bounty which the Lord has given the earth.

Thanksgiving should be the keynote of the day. True enough, the hostess may give her greatest thanks when the last guest is gone and the last dish is wiped and put away, but why go into that?

Most young daughters decide that the family has had old standbys of food on holidays long enough. They want to show off so they suggest to Mother that she let them have an avocado salad or a bombe or mousse. Mother usually has sense enough to say

"No", whereupon daughter decides Mother is getting old and "sot" in her ways.

But no; Mother is recognizing that tradition has value. She remembers the buttered onions, the giblet sauce, the roast turkey or chicken of her girlhood Thanksgivings. To-day's dinner would n't be complete without them. She wants you to have just such memories when you grow up. You'll be surprised, thirty years from now, to see how wistful and sentimental you can get over the Thanksgiving dinners you had at home. "Yes," you will say, "those were the good days, the good old days." You don't believe it now, but it's true.

But if you are wise, you will assist Mother in simplifying the menu. Years ago they ate well but not wisely. There was too much food. After the dinner there was torpor, which was perhaps just as well since no one had spirit enough to revive old family dissensions. Perhaps the day was so peaceful because every one was "too full for utterance."

Here is a modified menu —

Oyster broth
Roast chicken or turkey — Dressing — Gravy
Mashed potatoes — Buttered onions — Mashed squash
Cole slaw
Cranberry sauce — Peach pickles — Celery
Rolls — Strawberry jam — Butter
Pumpkin pie — Apple pie

Even there there is too much food, but what is a Thanksgiving dinner without mashed potatoes and mashed squash and boiled onions? Just nothing at all! Some families insist upon adding candied sweet potatoes to the vegetable list. Count the calories, but notice also that there is a goodly supply of cellulose — it's needed.

Christmas. The classic menu for this holiday dinner is found in one of Charles Dickens' stories. Since the family which enjoyed this dinner was poor, desperately poor in everything but family loyalty and Christmas spirit, we have the meal stripped to its bare essentials.

They are roast goose, dressing, mashed potatoes, hot apple sauce, Christmas pudding, followed by chestnuts — chestnuts roasted on the hearthstone.

Suppose we add a few other dishes to this meal —

Clear tomato soup
Roast goose
Sage and onion dressing Giblet sauce Mashed potatoes
Buttered turnips Brussels sprouts
Apple sauce Crusty rolls
Celery Ripe olives Spiced watermelon rind
Plum pudding Hard sauce or lemon sauce
Mince pie and cheese
Coffee

Cranberry sauce may replace the apple sauce.

String beans may replace the Brussels sprouts, cole slaw may be added.

A sensible variation from traditional dessert is a gelatin plum pudding, or lemon sherbet, or Mother's good home-made ice cream, but you won't get much sympathy when you suggest the change.

Note: We have had a discussion of party meals, holiday meals, breakfasts, luncheons, and dinners and not once have we found it necessary to include fruit cup, chicken à la king, canned peas, ice cream, and angel food.

These are all foods in good and regular standing, but they have been used over and over again until it seems more sensible to omit them. Even though they are not included in the menus they will still be served, for few folks, after all, dare to be food adventurers.

How about yourself?

Would you be so foolish as the people who go to the city to visit a friend and beseech her to take them to a foreign restaurant? They say, "You always have such interesting food stories to tell about unusual eating places. Take us to one, won't you?" The city resident takes them, interprets the menu, calls over the head waiter, who adds his help in interpreting the foods. The guests study the card long and seriously. "What did you say was in the ravioli?" they ask for the fourth time. They half listen, then with an air of relief they turn to the hovering and solicitous waiter — "Bring me roast beef, mashed potato, and apple pie," they say. And they add parenthetically, "I'm sure of those things anyway." As hostess you can't show your feelings. But you snort to yourself — "Want to try new things, want to be food adventurers — huh!"

Candy

Most homemade candy is over-rated. It is too sweet. It lacks the uniformly attractive appearance of "store candy." It needs to be eaten when it is fresh. Aging does not improve it.

Such being the case, is n't it wise for the amateur candy maker to develop a few specialties which are not dependent upon technique, controlled temperatures, humidity, and special blends or formulæ? Commercially made candy, like pickles and baked goods, does not just "happen" to be good, day after day. It keeps its standard because of controlled conditions within the factory and because of scientific experimental work.

Home-made dipped chocolates are usually unevenly shaped, lifeless in appearance. Of course, the amateur can attain the professional class, but why waste time doing it? Why not work out unusual confections which are not to be purchased at any and every shop?

There are candied orange and grapefruit peels with ends dipped in chocolate, spiced nuts, stuffed fruits, decorated lollipops or barley sugars, Persian balls, popcorn balls.

Good fondant, fudge, caramels, taffies, and brittles may be made by observing certain fundamental rules for working with sugar. Let us study them:

Sugar is soluble.

Cooking a sugar solution changes the double sugars in that solution to single sugars. Single sugars do not crystallize as easily as double ones. Sucrose is a double sugar. Levulose and dextrose are single sugars.

Corn syrup and molasses contain single sugars. Therefore, any solution with them in it will not crystallize easily or quickly.

Butter and milk retard crystallization.

Acids hydrolyze double sugars, especially in presence of heat.

As sugar solutions boil they lose water by evaporation. The syrup becomes more dense and the temperature rises accordingly. At the various temperatures the cooled syrup gives certain tests or reactions.

Hot sugar solutions crystallize quite easily. A nucleus of

crystals draws others to it like a magnet. If the syrup can cool with little jarring, there is less danger of crystallization.

After syrup has cooled and is stirred a mass of crystals develop which are small in proportion to the amount of stirring given them.

A well-stirred and finely crystallized mass is lighter in color than an unstirred one because there are more crystalline surfaces breaking up the light.

Fondant "ripens" on standing in a covered container for twelve to twenty-four hours.

Sugar melts in the presence of heat, forming a caramel. A certain amount of acid is developed. When soda is added to the melted sugar, the resultant gas lightens the color and aërates the mixture.

Humidity affects candy making. The moisture in the air may be absorbed by the syrup. This means a higher testing point is required.

It is foolish to attempt to work without a candy thermometer. Be sure to test the thermometer before using it. It should register a temperature of 212° F. or 100° C. when placed in boiling water. Make allowances in boiling syrups for deviations from this standard.

In placing the thermometer in a boiling mixture place the bulb in approximately the center of the saucepan. Read the meniscus at eye level. If you use the cold-water test method, do not let the candy continue boiling while waiting for the test mixture to cool. Why not?

Spiced nuts are a welcome change from the salted nuts. Stuffed fruits are pretty to look at, pleasantly tart, and unbelievably "good for one."

Glacé nuts are easily made but must be served soon after making, especially if the day happens to be humid. The same rule applies to the glacé put on apples and on popcorn in popcorn balls.

Experiment with the candies and sweets given in this book and you will feel no need to attempt dipped chocolates or shaped bonbons. The New England folks used to say about the overambitious person that "he'd hung his hat up higher than he could get it down." That's what happens usually when amateurs try to make professional-looking sweets.

CLASS ACTIVITIES

1. Plan a birthday party for some member of your family. Decide on type of food to be served, who will be invited, and how.

2. Plan a suitable Christmas dinner to be served to your family; a Thanksgiving dinner to which you might invite some of the near relatives as well as the family.

3. Plan a Sunday evening supper to be served to a group of your boy and girl friends. You might review the first chapter as we talked about this problem there.

4. Plan the menu for a Sunday-school class picnic.

5. Imagine that your mother would like to entertain a group of her friends. She is having too large a group to serve at the dining table. Help her plan a buffet luncheon.

6. Plan the refreshments for a tea which you might like to give to entertain the girls of the eighth grade in order to interest them in electing home economics when they come to high school.

7. Plan the menu for a football banquet given for the coach and the football team.

8. Plan the menu for a rabbit supper at which the vocational agriculture boys and the vocational home economics classes entertain their parents.

9. Plan, prepare, and wrap attractively a box of Christmas candy for one of your friends.

10. Prepare and wrap a box of Christmas cookies for a friend who lives in a near-by town.

11. Make a list of the kinds of candy that you know how to prepare, tabulating the ingredients used, and the test you use to tell when the candy is done. Use this table:

Kind of Candy	Amount of Sugar	Other Ingredients	Test
Fondant	1 c. sugar	$\frac{3}{4}$ c. water $\frac{1}{8}$ t. cream of tartar	Soft ball

UNIT 6. FOOD PRESERVATION

General Discussion of Various Methods

Think what an easy time a bear homemaker has. Her family hibernates during the winter. It is unnecessary for her to preserve food for winter use.

But human housekeepers find a small amount of preservation is still necessary. Certain factors have lessened the need for filling the fruit and vegetable cellar in the way that great-grandmother used to do. These factors are coöperation of truck farmers of the South and the West with the railroads who now carry produce in their refrigerated cars, increased outputs of commercial canners who put up fruits and vegetables while they are still so fresh that the sun's warmth is on them, increase in number of families that live in apartment houses, increase in number of women employed outside the home in gainful occupations.

If a woman has a garden and grows a surplus of produce, if she is staying at home and bringing up a family, then it is quite possible that she is economically wise in stocking her fruit cellar. But if she has to purchase the fruits and vegetables which may be none too fresh she would be wiser to rely on the commercial canner. It is foolish to carry over the tradition that a good housekeeper fills her cellar to repletion during the hot days of summer and autumn. You might as well insist that all of to-day's travel should be by horse and buggy.

Ever since the hot sun's rays dried foods, this method has been used in food preservation. Examples are the dried fruits and the strips of desiccated meat prepared by the American Indians.

Intense cold preserves certain types of food. Frozen "hunks" of venison, frozen fish are cases in point. The recently developed "Birdseye" quick-frosted or fresh-frozen foods set the pace for the newest type of food preservation. Then we have cold storage of foods. This may be commercial or it may be likened to the food put into the home refrigerator.

Dry salt and dry sand have been used for the storage of fresh beans and root vegetables.

A combination of salt and woodsmoke comes to mind when we think of smoked hams and bacon.

Coating the outer surface of food to make it impervious to air is one mode of preservation. Examples are pineapple cheeses rubbed with oil and shellac, and eggs stored in water glass.

Foods kept in acidulated brines or syrups experience a change in texture and flavor. So long as the food is kept entirely submerged there is little spoilage. Examples of this type of preservation are pickles, sauerkraut, pickled peaches. Sometimes the liquid has been made acid by the development of lactic acid. This is brought about by the action of bacteria on the pulp and fiber of the food. Dill pickles, sauerkraut are examples. A certain amount of controlled fermentation "firms up" cucumbers and gives the firm, crisp texture of a good gherkin. Commercial manufacturers use scientific methods to obtain their results. The homemaker tries alum and brines of uncertain strengths and usually succeeds in getting a failure.

It seems wiser for her to specialize in mixtures like chow-chow, piccalilli, India relish, bread and butter pickles than to attempt the difficult sweet or sour cucumber pickle.

Jelly Making

The homemaker is usually successful in jelly and jam making. Here the fruit is preserved because it is in such a heavy, concentrated syrup. Yeasts, molds, and bacteria cannot thrive in heavy, sweet solutions. They may, however, flourish on the exposed surface of such mixtures. For that reason, melted paraffin which makes the surface impervious to air is put over the top of freshly poured jelly and jam.

When Meg married John, she said to him in the first flush of her bridehood, "Bring home any guest any time you want to, John. Let them see what a nice little home we have and what a good cook you have for a wife." John took her at her word. One hot July night he brought a guest. This was in the days before telephones, so they walked in unannounced. No smiling Meg was at the door to greet John. He called her. No an-

swer. Alarmed, he sent the guest to the garden while he searched the house.

In the kitchen he found Meg, sticky jelly from top to toe, jelly all over the kitchen. "Why, darling, what is the matter?"

Meg threw herself, sticky apron and all, upon his manly bosom and sobbed, "The jelly won't jell."

John, being a young husband, laughed at her. And that was absolutely the wrong thing to do.

Remember that incident in "Little Women"?

The advent of what commercial preparations has made such tragedy unnecessary?

This is Goldthwaite's definition of an ideal jelly: "Ideal fruit-jelly is a beautifully colored, transparent, palatable product obtained by so treating fruit juice that the resulting mass will quiver, not flow, when removed from its mold; a product with texture so tender that it cuts easily with a spoon, and yet so firm that the angles thus produced retain their shape; a clear product that is neither sirupy, gummy, sticky, nor tough; neither is it brittle and yet it will break, and does this with distinct beautiful cleavage which leaves sparkling characteristic faces. This is that delicious, appetizing substance, a good fruit-jelly."

Fruit juices jell because of the acidity and the pectin in their composition. As a fruit ripens fully the amount of pectin lessens. Does that explain the statement in many jelly recipes which says "Choose underripe fruit"?

The following table lists fruits which are rich in pectin:

apples — sour	gooseberries
blueberries	grapes
cranberries	plums — sour
currants	quinces
crab apples	citrus fruits

Here is the test for pectin:

Alcohol precipitates pectin in a jelly-like mass. By the character of the precipitated pectin an approximate estimate can be made of the amount of pectin in the juice. For the test, one tablespoon of juice is poured into three to five tablespoons of alcohol. Sometimes equal quantities of juice and alcohol are used, but the larger amount of alcohol gives a better test. Turn the container gently

from side to side. If a test tube or graduated cylinder is used, it can be turned slowly upside down and back to bring all the juice in contact with the alcohol. If the pectin comes down in a solid mass, there is a sufficient quantity to make jelly. If the pectin is flocculent or in small flakes, the juice needs boiling down to concentrate the pectin.

By using commercial pectin the amount may be made normal. By combining the juice of an acid fruit with that of a sub-acid one the lack of acidity is supplied. Find a recipe which calls for the addition of apple juice to that of another fruit juice.

Sometimes in making a cranberry jelly a curdled mass is formed after the sugar is added. This happens because too large an amount of cold sugar put into hot juice gives a partial precipitation of pectin. It is better to add the sugar slowly.

Jellies and jams made with commercial pectin call for more sugar than used in the old method. Why? It is possible to get figures for comparative costs of a glass of jelly made in the old- and the new-fashioned way. Test them for accuracy.

Some people object to the flavor of jellies made with commercial pectin. They think they are tasting the pectin. But since that is quite tasteless, they are mistaken. The unfamiliar flavor is that of fresh-fruit juices cooked in a minimum amount of time. They expect the strong cooked and concentrated juice flavor which has always been found in jelly heretofore. This flavor was there because the juices had to be cooked to a degree of concentration which would let the natural pectin in the juice jell the mixture.

Either cane or beet sugar may be used successfully in jelly making.

Since jellies are so rich in sugar, there is slight chance of bacteria, yeasts, or molds growing on the surface. The growths are killed because the concentrated sugar mixture draws moisture from them. Clean, hot, dry glasses aid in preventing mold or fermentation.

It is now believed wise to pour a thin film of melted paraffin over the jelly as soon as it has been poured into the glasses. This protects the jelly from stray yeasts, molds, and bacteria while it is cooling. Later a heavier layer of melted paraffin may be put on. As this is poured in, the glass should be tilted so that the liquid paraffin touches all the sides of it.

Paraffin which has been heated to smoking temperature, glasses which have drops of jelly on the inside rim above the surface of the jelly, jelly which is stored in places of extremes in temperature, jelly with too little sugar for the acid content of the fruit may be the causes for "weeping" of liquid drops on top or at sides of paraffin film. Experimentation is still going on as to the best method of obtaining a perfect seal.

Canning Fruits, Vegetables, Meats, Poultry, Fish

When cherries were ripe Grandmother used to say, "It's high time for me to put up some cherries. I'll have to do some canning." Your mother says in a like situation, "I must get at the processing of these cherries." Both are saying the same thing. Your mother is using the modern vocabulary which takes into account the modern way of "canning." This method is similar to that used in commercial canneries where they "process" the food.

Wars seem to increase the home preservation of food. This may be due to shortages in canned goods, surpluses in home gardens, a sense of thrift which makes it a pity to waste so-good home-grown vegetables when so many too many of them ripen at one time.

Science has changed the home canning procedure because we now know that: (1) bacteria, wild yeasts, or molds may fall into the open-kettle cooked food or the empty jar waiting to receive that cooked food; (2) botulinus, a deadly organism, and the spores thereof are not killed at boiling temperature but only at a much higher degree of heat; (3) cooking under the pressure of confined steam raises the temperature within the cooker and the jar of food to a high enough temperature to render botulinus ineffective. This is true when pressure is held at ten pounds or more; (4) botulinus thrives in a nonacid medium, and that therefore only tomatoes and fruits can be safely processed in a water bath; (5) the vacuum created within the jar as cooked food cools creates a seal of its own which aids the artificial seal created by jar closure; tilting a jar of processed food after re-

moving from the canner breaks that seal, and therefore jars of food are no longer stood upside down during the cooling process; (6) the empty space found at the top of a jar of processed food must not be filled with added liquid or cooked food when processing is complete since such addition destroys the vacuum and the sterility of the contents.

If science has taught the above six facts experience has shown us the following: (1) no canned or processed food can come out of a jar better than it goes in. Foods to be canned should be fresh, well flavored, well colored, well shaped; (2) fruits may be canned in water, in lightly sweetened syrup, or in a syrup made with part sugar and part corn syrup; (3) fragile strawberries hold their shape and color better when the required sugar is put over them the night before they are to be processed. The juice and the sugar when combined seem to strengthen the fragile fruit; (4) processed fruits in glass jars retain their color better when stored in dark places than when placed where light can fall upon them.

Pressure cookers should be used according to the directions which came with the cooker originally. Do NOT think you can safely change these rules. The one exception is found in the prewar directions which called for less than three inches of water in the bottom of the cooker when processing is started. Put in three inches.

The gauge attached to the cooker registers the amount of pressure exerted by the confined steam. These gauges are delicate and may get out of order. Have the gauge tested at least once a year before the canning season starts. Utility companies, local testing laboratories, as well as the cooker manufacturers, will do the testing.

In using the water bath method for canning fruits and tomatoes observe these cautions: (1) set the filled jars on a rack or trivet placed in the bottom of the canner. This removes the glass jar from contact with the hot metal bottom of the canner; (2) do not crowd the jars so closely that they touch one another; (3) have the water hot, but not boiling, when setting the jars in; (4) have enough water so that the tops of the jars are submerged to the depth of an inch at least; (5) count the processing time after

the water comes to a boil; (6) keep the water boiling continuously for the required processing time.

Theoretically the methods outlined for home canning should make home canned food as safe as that commercially canned, but since home conditions are not so scientifically controlled it is necessary to do the following: Before tasting the contents of a home canned jar of vegetables put the contents in a saucepan and let them boil for 15 minutes. Then, and then only, is it safe to taste. Should there be a queer odor when the jar is opened the food is thrown away at once. It is NEVER TASTED or USED.

Should some of the home canned vegetable be left over after the first day's boiling, it should be boiled again for 15 minutes.

These precautions are taken because of the widely spread occurrence of the botulinus organism, which is deadly. Just because someone in your home has canned vegetables or meats in some way other than the pressure cooker method and no dire results have followed, it does not mean that they may not follow in another batch of canning. It is better to be safe than sorry; therefore we repeat: Use the pressure cooker for all nonacid vegetables, meats, poultry, and fish.

We know that food preservation is based on laws of chemistry, physics, and bacteriology. There is no "black magic", no luck, no favorable or unfavorable time of the moon which makes food keep or spoil.

CLASS ACTIVITIES

1. List the kinds of food that are kept in the home from day to day; for a longer period of time.

2. Find out how each of these foods is best kept in the home under such conditions as

   a. A home which has a cool cellar

   b. A home with a refrigerator used in the summer; a window box used in winter; a warm cellar

   c. A home with mechanical refrigeration all the year round

3. Let bread mildew; fruit sour; meat spoil. Try to find out causes of spoilage.

4. Find out why corn meal spoils and other cereals, butter, and oil become rancid.

5. Find out from your science class what conditions are favorable and what unfavorable to bacterial growth. Try out some experiments to show the truth of your findings.

6. If you live in the country and raise much of your own food, make a canning budget suitable for your family.

7. If you live in the city, discuss the problem as to whether it is wise for you to can or not. If you decide to buy canned goods, make a buying plan for your family. Find out the prices for canned goods by the case at your local grocer's.

8. Make out a score card for your canned products.

TEST: Principles Applying to Food Preservation

Directions: On the right side of the page are listed various processes used in preserving foods. On the left-hand side are listed the principles of food preservation which are applied when these various processes are used. On a sheet of paper make a list of these processes. Place the numbers of the principle or principles of food preservation which are applied in the use of each process as listed, in the space following the name of the process.

For example, principle 6, salt may be used as a preservative, is applied in the making of kraut, hence the number 6 is placed in the blank following this process, thus:

i. Making sauerkraut 6

PRINCIPLES

1. Cold hinders the growth of micro-organisms responsible for the spoiling of food
2. Heat kills molds, yeast, and most bacteria
3. Drying retards the growth of micro-organisms
4. Smoke may be used as a preservative
5. Air is necessary for the growth of most bacteria, hence exclusion of air hinders the growth of micro-organisms
6. Salt may be used as a preservative
7. Sugar may be used as a preservative

PROCESSES

a. Open-kettle canning
b. Cold-pack canning
c. Hot-pack canning
d. Freezing foods
e. Drying of corn
f. Curing hams
g. Making preserves
h. Making jelly
i. Making sauerkraut
j. Keeping foods in cold storage
k. Packing eggs in water glass
l. Using a pressure cooker

UNIT 7. FASCINATING FOODS

Foods and Scientific Research

Here are grouped some of the most recent findings of experimental workers in foods. You will find additional material of this type in the discussions of cakes, jellies, hot breads, vegetable cookery, meat cookery. Some of the material given is almost revolutionary in its content, some is "old stuff" to your mother. She knows the finding or fact, and not the reason therefor. Often she may not realize why she follows certain procedures to get the results she wants.

Sugar. Sugar toughens cellulose. Watermelon rind for preserving is not cooked in a strong sugar solution until after the rind has been cooked in plain water.

A dish which has been overseasoned with salt may be made more edible by addition of a small amount of sugar.

Sugar offsets acid flavor. That 's why we sweeten fruit sauces.

The taste buds on the tongue are dulled by extreme cold; that is why we oversweeten mixtures to be frozen. If we did not, the frozen ice cream would not taste sweet enough.

On the other hand, too sweet or heavy a solution freezes slowly. In using mechanical refrigeration this must be borne in mind.

Finely granulated sugar gives a better emulsion and a finer grained cake than does a coarse sugar.

Brown sugar contains a small amount of acid, which fact must be taken into account when making a candy like penuche.

The moisture content of honey allows the omission of one-fifth of liquid called for in a recipe when honey is substituted for sugar.

Sugar may be melted in the presence of dry heat. It gives off water as the decomposition continues. The final result is a dark brown liquid with little sweetness left for flavor. This result is called caramel. Caramelization may be carried to the point where the mass is almost black and bitter. This material is used in the making of coloring sauces for soups and gravies. What is the commercial name for such sauces?

If sugar is cooked with a liquid, as in the making of candy, the density of the syrup becomes greater as the liquid is evaporated.

The greater the degree of density the higher the temperature of the mixture as it cooks.

Syrups crystallize easily. One crystal acts as a nucleus for others. It attracts them as a magnet. Crystallization is increasingly easy, as a syrup increases in density when the temperature of the boiling syrup rises. To prevent crystallization, it is necessary to stir or jar the hot mixture as little as possible. That is why candies are not poured out nor handled until the temperature is about 95° F. This is lukewarm or body temperature.

Starches. Starches have the faculty of thickening liquids in the presence of heat. They themselves are poor conductors of heat. Is that the reason that cornstarch and flour mixtures need so much stirring?

Starches lump or cook quickly at the point where they come in contact with heat and moisture. That is why we stir starches with cold liquids or add granular material to them before combining with liquids.

Starches swell in the presence of heat and moisture. In swelling they absorb loose liquids round about. The result is a stiffened or thickened mixture. Blancmange is a case in point.

Fats. Fats change easily from liquids, to semi-solids, to solids. Temperature is usually the deciding factor. Some fats have lower melting temperatures than others.

Fats in emulsions are easily digested. Cream and egg yolk are examples. Milk and butter have fat emulsions also.

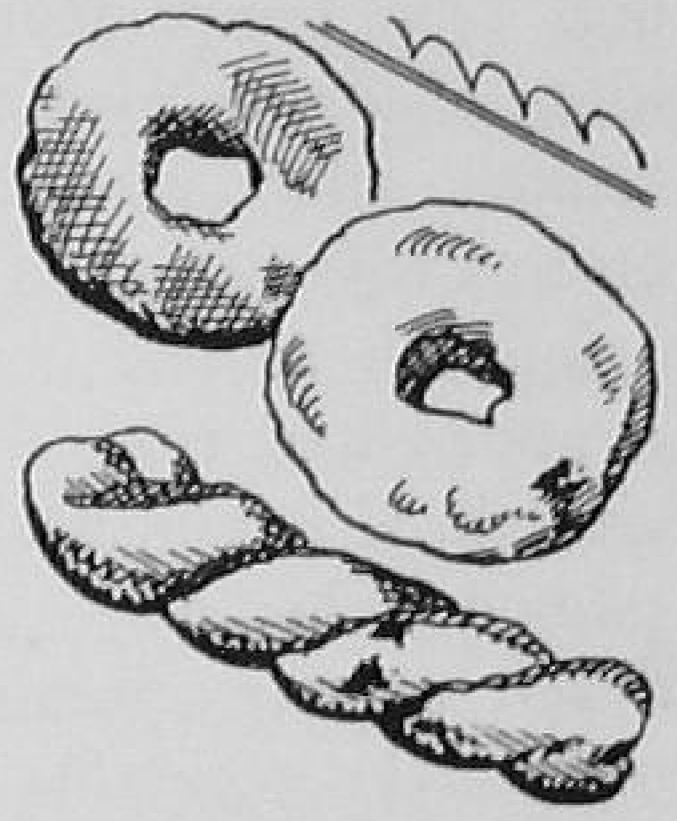
Fats become rancid because they are exposed to air, light, and warmth. Oils acquire this disagreeable odor and flavor somewhat more quickly than more solid fats.

Variations in Fats. An oil is almost 100 per cent fat. So are lards and hydrogenated fats. Butter and oleomargarine, having some protein content, may contain as low as 85 per cent fat. In ordinary cooking such a variation does not affect the result appreciably. But for experimental cookery purposes, the kind of work you will carry on in college courses in home economics, you will make allowances for variations.

The various fats have different smoking temperatures. This fact is used in selecting fats for deep-fat frying. Cottonseed oil smokes at 233° F., butter at 208° F., lard at 190° F., olive oil at

175° F. Smoking temperature is important because it is at that point that decomposition of fat occurs. The odor and taste are disagreeable at such a point.

Fats vary in their power to shorten a flour mixture. Lard ranks first, cottonseed oil third, butter fourth. There is more to this factor of shortening than appears in this ranking. Fats with high melting points give a baked product that is harder when cold than if a shortening with a lower melting point were used. Here again you need to follow experimental work which has been done in colleges.



Perhaps the most interesting piece of work done with fats concerns fat absorption. Doughnuts, which are fried in deep fat, may be dry, greasy, crusty, or thin.

Experimentation shows that the surface area of the doughnut, the temperature of the ingredients when mixed into the doughnut dough, the amount of mixing, the kind of flour, the length of time the dough stands before the doughnuts are fried, the temperature of the fat, and the proportion of ingredients in the mixture all affect the result.

Is it any wonder that the housewife sometimes has good doughnuts and then, when she uses exactly the same recipe, has dreadful ones? There are at least fifteen chances for variation.

Naturally a doughnut which is large and flat will have more surface exposed to the fat than a small plump one. Doughnuts mixed at room temperature with ingredients at the same temperature absorb less fat than those mixed at a higher temperature.

Too long mixing gives a compact crumb but a smooth crust. Optimum results according to Lowe, from whom these facts are taken, occur when doughnuts are mixed using eighty strokes. Bread flour absorbs less fat than pastry flour. Increasing sugar, fat, and egg increases amount of fat absorption. Decreasing flour or increasing liquid has the same effect.

Proteins. Albumin, found in egg white and in meat, is soluble in cold water. It coagulates at a temperature of approximately 135° F.

Overbeating egg white drives off moisture and makes the albumin dry and powdery.

Albumin is toughened by boiling or by cooking too long.

Bromelin is the proteolytic enzyme in fresh pineapple which makes it impossible to stiffen gelatin mixtures when used. Cooked pineapple juice has lost the enzyme and may be used with no difficulty.

It is the albuminoids in meat that are responsible for its toughness. They are insoluble in water and in salt solutions and are rendered hard and dry by application of heat.

Vitamins. Vitamins may be unfavorably acted upon by cooking. The temperature, the length of time used in cooking, alkalinity of liquid in which food is cooked, presence of air while being cooked, affect certain vitamins. Studies are now being carried on to verify earlier beliefs.

Spinach cooked in a sealed can from which the air has been removed and canned without any soda in the liquid has more vitamin C left in usable condition than freshly prepared spinach cooked at home.

But to keep vitamin C in the canned spinach, it is advisable to heat the vegetable for serving in the sealed can, opening it just before time to season and serve the vegetable. This is done to prevent the oxygen in the air from oxidizing the vitamins.

Vitamins are divided into those which are soluble in water and those which are soluble in fats. Foods containing water-soluble vitamins — B, C, and G — should not be soaked in water nor should they be cooked in large amounts of water which is later thrown down the sink.

A daily diet containing at least a pint of milk — better a quart — good amounts of fresh fruits and fresh vegetables, butter, eggs, and whole grains in cereals and enriched flours will give an adequate supply of vitamins.

Foods and Literature

Without doubt your instructor has asked you to write a paper or theme on some food subject. If you have already written it, what kind of paper was it? Dry as cornstarch and just about as interesting, or juicy and enjoyable as a deep-dish apple pie?

Let's hope that you have been convinced by the time you reach this chapter that writing about food can be good fun. It is quite possible to put a chuckle, a grin, a twinkle into any food subject.

Read the magazines that have articles devoted to food. You will find all types of material. Some of it is sober, substantial, scientific fare. Some of it is popular and fizzy as ginger ale with just about as much substance. Still other articles are like a good fruit cup, refreshing, stimulating, and yet nourishing.

You will find as you study the articles that those you like best have been written by authors who knew how to play with words, who knew the value of an adjective, an adverb, who had imagination, and a lively sense of humor.

If you are interested, start a scrapbook of interesting articles on food. Begin to watch for food descriptions in stories. You'll find one paragraph here and another there. Sometimes you will find whole chapters devoted to food. Occasionally the theme of the story will be food. There have been some famous feasts written up in fiction. Try authors like Charles Dickens, Charles Lamb, Louisa M. Alcott, Mrs. Gaskell, Edna Ferber, Alice Hegan Rice, Kathleen Norris, Sophie Kerr, Booth Tarkington. You might list the food rhymes in Mother Goose and, going to the other extreme, find food references in William Shakespeare. Some day you might collect an "Anthology of Fascinating Foods and Feasts."

UNIT 8. MARKETING AND FOOD STORAGE

Economics of Purchasing

Marketing and food purchasing are fun. The stores show so many beautiful fruits and vegetables, such cunning containers, such attractive packages, that it is hardly safe to trust one's self in a modern food store.

What should you know in order to be an intelligent buyer? Your obvious answer is, "I must know what my needs are."

For this discussion let's center on — well, it does not make much difference — suppose we say soap. You know that soap for laundry purposes has to do certain things which you do not ask of hand soap. Do you have a right to demand that the soap you purchase be identified with a descriptive label? What have you a right to expect on the label?

What does the legislation of the 1906 Foods and Drug Act promise to do for you? How does the present legislation differ from the earlier? What is the official name of the new legislation? Frequently it is said that the manufacturers lobbied against the passage of this act. Did they all lobby against it or was it just certain manufacturers?

Is national legislation all that protects you? What about state and municipal legislation? Does your town have sanitary laws? Does it have a weights and measures law? Where would you go to find out? To whom would you complain if you suspected you were being cheated? Is this a service you have a right to expect because of taxes your family pays? Don't manufacturers have to pay these taxes, too? Are they not vitally interested in legislation that safeguards them against the occasional dishonest merchandiser?

Is the bar of soap sold at a special sale of the same weight as the bar of soap of the same make sold in the usual way? Would you say that all soap costs too much? Would you be better off in the long run if you made it at home? Why has the making of soap gone out as a home industry?

Is powdered soap as economical as flake or as bar soap? What are the advantages of aging soap in the home?

You hear a soap advertised over the radio and you see the advertisements in the magazines. Has the cost of all this advertising reduced or increased the price of a bar of soap? Where can you find out so that you will not draw an uninformed conclusion? Might it be possible that increased sales due to the advertising have reduced the cost of an individual bar?

Has seeing and hearing the advertising of one brand of soap made you more generally "soap conscious?" Are you going to

insist upon getting the advertised brand or would you take any soap just so it meets your needs? If soap is soap after all, and by and large does the same thing — cleanses the surface to which it is applied — do you act in a rational way when you go to a supermarket and reject an unadvertised brand in favor of an advertised brand?

Why do you go to the supermarket? Do you like the wide spread in hours that the store is open, the noninterference of sales people as you make your choices? Does the fact that free parking space is available make you a steady customer?

Do you patronize the supermarket rather than the chain store? What differences are there between these two stores? Do you think chain stores should be taxed out of existence? If they can offer better goods at lower prices because of their close-knit organization and large buying power are they a threat to the independent dealer?

Are chain stores impersonal and heartless? Should they extend credit in times of stress to their regular customers? Do you fall back upon the credit and delivery store only in an emergency? Is that fair to the credit store? Should the charge and credit store offer the same goods at two prices — a lower one if the goods are paid for and taken out of the store and a higher price if they are charged and delivered?

Do you find the telephone saves time when ordering? Are goods purchased sight unseen apt to be of uncertain quality? Is that less true of advertised brands than of fresh products? When you give an order by telephone is it as large as it would be if you were in the store? If certain goods are offered at an exceedingly low price, cut below the usual selling price, can you blame the telephone order-taker in the store for not telling you about them when you give the order?

Is the shopkeeper justified in offering the specials known as "loss leaders"? If their purpose is to pull you into the store with the hope that you will buy other things once you are inside, and if you purchase the "loss leader" only and then finish your shopping somewhere else are you a good shopper or a rather unethical one?

Does it matter to you whether the shopkeeper makes a profit or not? Is your tax burden going to be increased if the shopkeeper

fails, dismisses his sales force who then become public charges? Can he stay in business if he does not make a profit? What profit is "fair"?

If a farmer's market with a stand in an outdoor location offers bars of homemade soap at a much lower price than the established store, do you suppose the lower price is due to the fact that the farmer employs no middlemen? Does the distribution of manufactured goods cost too much? Could we get along without that distributive system in view of the fact that manufacturing today tends to centralize itself in large factories and at somewhat distant points? If small factories spring up around-about would the production cost because of increased overhead "up" the price of soap to the purchaser? If so, how much? Would it be more or less than the cost of distribution necessary because of the centralization of soap manufacture?

Suppose you were one in a group of people who decide to buy soap in case lots and then distribute the contents among yourselves. Would your co-operative buying save much? Who would pay the cartage charges for the case? Should you add the cost of used shoe leather, of time, or of gas incurred in getting the soap? Would all the members of your co-operative group be satisfied with the same brand of soap or would there be dissatisfaction because of the limit in variety? Which urge would prove stronger — a chance to save a few pennies or your personal like for a different kind of soap? Should the altruistic desire to be co-operative and help one's fellow-men override one's personal likes and dislikes?

All this soul-questioning over buying a bar of soap! No wonder we need to study all the angles of consumer education before we state our beliefs, and square our practices with them.

Throughout this book leading statements are made which should guide us in buying. Standards and available materials are mentioned frequently. Their incorporation in the text shows that buying and consuming are not a thing apart, but so interwoven with our activities that we learn, we judge, we accept, we reject what is offered to us even as we go about our daily life.

Staples. In purchasing staples it is wise to buy in as large quantities as possible. The price is lower. Flour and sugar are cases in point. But if so little flour is used that weevils have a

chance to get in or if so little sugar is used that the money tied up in the sugar might well have been used for something else, then the large-quantity purchase is not economical.

Spices should be purchased in the smallest possible amounts. They should be of the best quality. They should be in as nearly air-tight packages as possible. So little spice is used in any one dish that the difference in cost between best and poorest is negligible but the difference in flavor is great.

Meats. The purchase of meats, poultry, and fish is discussed in the chapters devoted to their preparation.

Dairy Products. The purchase of dairy products is discussed in the chapters devoted to their preparation.

Fruits and Vegetables. Fruits and vegetables may be purchased fresh, canned, and dried. Intelligent selection of fresh fruits and vegetables is discussed in the chapter devoted to their preparation.

Canned Goods. What should we know when purchasing canned goods?

A canner usually puts up at least three qualities. It is the custom to choose one pretty-sounding name for his highest quality, another name for his medium grade, and a third name for the lowest grade. A purchaser needs to become familiar with these names, which vary with the output of each cannery, and choose the grade which meets her needs.

A strong movement to grade canned goods so that the label includes a statement of the flavor and the grade as well as the information now printed on the label got under way late in 1934.

The American Home Economics Association is vitally interested in all food legislation. Professional home economics magazines should be consulted each month for a statement of the most recent developments.

When canned tomatoes are to be used for soup, it is foolish to pay the price for the whole-pack variety. Salmon which will be broken into bits and creamed does not need to be as beautiful in color as the salmon which will appear undisguised as salmon salad.

The label of the can should be studied. Not all the desired information is found on the label, but, through the efforts of the canners themselves, there is much more reliable information about labels available now than there was a few years ago.

The variety in the sizes of cans has been recently reduced. The most popular sizes are listed as follows, together with the average content in cupfuls: The can known as 8 ounce holds one cup; picnic (No. 1 Eastern) holds one and one-third cups; No. 1 (tall) holds two cups; No. 2 holds two and one-half cups; No. $2\frac{1}{2}$ holds three and one-half cups; No. 3 holds four cups; No. 3 (tall) holds five and seven-eighths cups; No. 10 holds thirteen cups.

Sea foods of any kind are outstanding in their iodine content. People who live in the goiter belt (many of you who read this do) need iodine. Therefore we need fish. Inland or lake fish are seldom canned and there are seasons when we can't get them; therefore, we should include canned sea foods in the diet. Also, oils in fish products usually contain Vitamins A and D.

Fresh Fruits. Experience and garden or farm life give one the best basis for judging the freshness and quality of fresh fruits and vegetables. A city-bred girl who never has picked fresh raspberries or strawberries does not realize what deterioration sets in during shipping and marketing.

Cranberries. Good ripe cranberries should have a bright or dark red, shiny surface. They should be dry, clean, and hard.

Recent research shows that cranberries may be substituted for fresh tomatoes, grapefruit, or canned spinach, for their Vitamin C content. They should be more popular, for their food value is good.

Oranges. The supply of oranges in the market at any given time usually influences the price. This in turn affects the cost of juice. When the largest size (80) costs $1.20 a dozen and the smallest (288) costs $0.34 a dozen, and other sizes in comparison, the cheapest orange for juice is the size 200.

Grapefruit. Color ranges from a pale yellow to a deep russet. Such color is not an index of flavor and juiciness. A bright green shows that the grapefruit is not ripe. Plentiful from October until June, they are most reasonable during the winter months. In shape they should be round or slightly flattened, rather than misshapen. They should be heavy for their size.

Bananas. To be ripe, bananas should have skins of bright yellow flecked with brown. They are high in food value, reasonable in price, and are a year-round fruit. They are very digestible when thoroughly ripe and are now recommended for children.

Dried Fruits and Vegetables. The dried fruits most commonly used in this country are prunes, apricots, pears, peaches, raisins, currants, apples, dates, and figs. Any one of these may be purchased in bulk or in packages.

Currants are packed in a country where standards of cleanliness are low. Either packaged or bulk need careful washing. In this case, given a clean store, the bulk ones are as satisfactory as the boxed ones.

Apricots should be medium sized and a golden color. The dingy, dark brown ones are unsatisfactory. Mohr Park apricots are the best.

Peaches may be purchased either peeled or unpeeled. The unpeeled are cheaper but have a fuzzy sandpaper skin when cooked. Either variety needs addition of sugar, lemon peel or lemon juice, and a drop of almond extract.

Pears should be used more freely. They are delicious when soaked overnight, then baked slowly in a casserole in a slow oven.

Dates may be purchased in bulk or in packages filled with the fruit which has been pasteurized. There are dark dates and light ones, the latter having a rather horny skin.

Raisins are dried grapes. There are the seeded and the seedless varieties; also dark raisins and the light ones called Sultanas.

Prunes are graded according to size. The largest ones are the 20–30s. (This number means that there are between twenty and thirty prunes in one pound.) The medium-sized prunes are 40–50s; 50–60s; the small prunes count up to 70–80s; 80–90s; and on up to one hundred and twenty to one pound. Repeated tests show that although there is a higher waste in stones in the smaller fruit, there is more pulp per pound. For a given sum the smaller sizes represent a more economical purchase. Sizes 60 to 90 are recommended.

Dried vegetables may be the legumes — peas, beans, and lentils (see following page for varieties); or succulent vegetables which have been dehydrated. These were popular during the first

World War, but their use has decreased, due to the fact that fresh and quick-frozen vegetables are now easily procurable in almost any place at almost any time of year.

Beans which are dried are navy, Lima, kidney, cranberry.

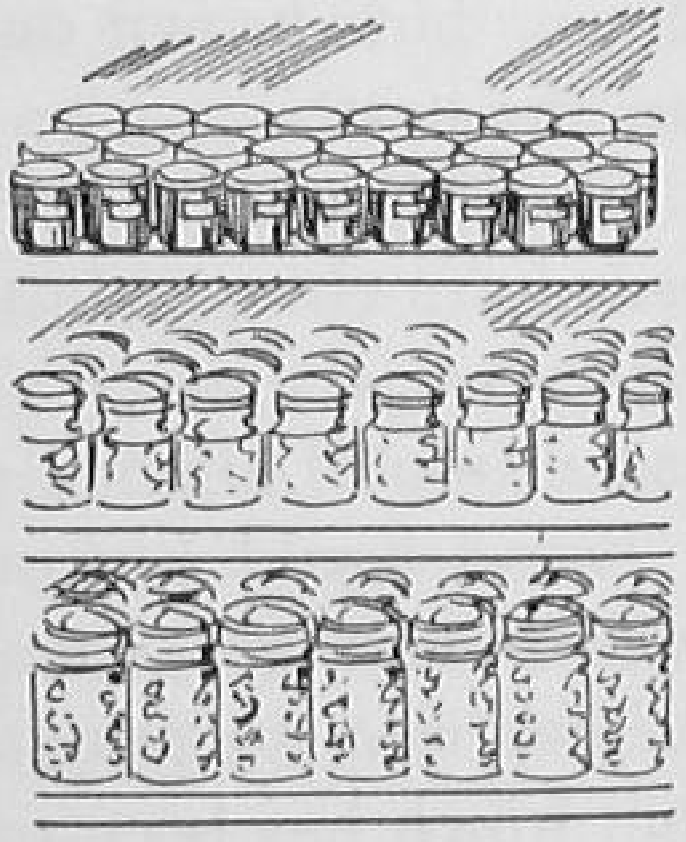
Dried peas are the chick peas and the so-called black-eyed pea.

Split peas may be either green or yellow.

Lentils are a dun-colored, dried, almost circular disk. They may be baked after soaking and cooking, as is done with other legumes, or they may be used in soups in the same fashion as split peas.

Storage of Food in the Home

When the Pilgrims landed, settled, and made homes for themselves, they paid scant attention to storage of food, for they had so pitifully little to store. The game and deer that they shot were eaten almost as soon as they were brought home. Fish were jumped from the brook to the frying pan and fire. But as life became more settled the problem of food storage became of importance. Their descendants raised enough provisions in the summer to last them over the winter. Bins in barn and cellar held vegetables, grains, and fruits; hooks in smoke houses were hung with meats; fruit shelves in cellars and pantries were laden with preserved fruits and vegetables, jams and jellies; crocks filled with meat, lard, salted and brined vegetables found resting place in cool cellars; rafters in the attic held ears of dried corn, bunches of dried herbs. It was not only possible but necessary, in Colonial and later days, to store and stock enough provisions to last the family for the winter, spring, and early summer until the earth with its growing things repleted the store.



As families left the farms and moved into the cities, the need for such ample supplies for winter grew less. The corner grocery was not so far away. Cellars and fruit shelves were kept well stocked, and while no home was complete without its bin for root vegetables, this was stocked more from habit than necessity.

When the city home grew smaller and became the apartment, storage space became almost a minus quantity. True there were

locker rooms in the basement, but these basements were warm and a poor substitute for the old-time cellar.

Then apartments became smaller — efficiency affairs with a kitchenette — and so compact there was no room for food storage of any amount. By this time the grocery store was augmented by the delicatessen shop. Here one could get cooked meats — one slice or many. One could buy crocks of baked beans or pans of macaroni.

Bread baking, butter making, milk distribution, fruit, vegetable, and meat canning had all become community and commercial endeavors. The necessity for storage of large amounts of food in the home for any duration of time was gone.

To-day most homes still stock staples, but in small amounts, and provide cool storage space for perishables.

What are the best ways of keeping foods to-day?

Staples. Keep in original containers with only a small slit in the top of carton, or transfer to glass or pottery containers which have tight-fitting covers. When in glass containers, it is easy to take stock of amounts on hand.

Spices. Keep in original containers with perforated tops tightly closed.

Coffee. Buy in small amounts. Purchase the vacuum-packed kinds. If possible, grind at home in amounts needed for each brewing of coffee.

Dried Fruits. Keep in original containers or in covered containers.

Root Stock. Keep in cool place, such as cellar. Room should be dark. Storage in clean, dry sand is often advisable.

Milk. Wash top of bottle when received, put into refrigerated space at once. In winter an outdoor window cooling box may prove adequate.

Leafy Vegetables. Clean, put in vegetable freshener if a mechanical refrigerator is used. This type of refrigerator has a tendency to draw moisture from uncovered foods stored in the box. If an ice refrigerator is used, wrap the cleaned vegetables in vegetable bags of cheesecloth or other washable material.

Cheese. Keep well wrapped with an inner wrapper of tin foil if possible. Keep in cool place.

Butter. Protect by paraffin or parchment paper. Store in cool place. A covered container helps to prevent butter becoming tainted.

Eggs. Keep in cool place. Wash shells before breaking eggs.

Meats. It is best to wrap the moist and cut surfaces with parchment paper. Store at once in well-chilled place.

Salad Oils or Dressings. Keep in cool, but not icy, place.

Fresh Fruits. Bananas are kept in cool place, not in refrigerator. Oranges and lemons are stored in a cool place.

Berries are spread on a large, flat surface and put in refrigerator; peaches, plums, pears, grapes, apricots, pineapples likewise.

Baked Goods. Bread is kept in closed, but not air-tight, bread box. This is usually made of metal, not wood.

Cake is kept in a similar place. When cake and bread are put in same container, the cake, if iced, becomes sticky and soft. Why?

Cookies and crackers are kept in tightly closed containers.

Canned Goods, Jams, Jellies, Pickles, Kraut. All these foods are kept in a cool room with as few changes of temperature as possible. The room is best kept quite dark. Any foods in brine need to be protected by covering the top with a clean cloth and a plate, and then weighting the plate to keep the contents of the container immersed in liquid.

In storing foods in a refrigerator it is wise to remember that the coldest place is immediately below the freezing compartment or ice.

Pests

Insect pests that may get into a kitchen or pantry are ants, weevils, cockroaches, silver fish.

The obvious remedy is to trace the pest to its source and destroy the inhabitants in the breeding place.

Then, if possible, remove the breeding place. This is especially easy to do with weevils. They are found in cereals, flours, or any food containing oils or germs of seed.

The next step is to remove the food which is attracting the pests.

The fourth step is to kill the pests already in the house.

Ants may be drawn to a sugar-syrup-saturated sponge. They may be suffocated in films of oil on small containers of water.

Cockroaches are suffocated by powdered substances such as sodium fluoride or borax blown along their runways. Any infected place should have all food supplies removed from it and then it should be washed thoroughly with strong soapsuds.

All suspected foods should be thrown away — containers as well unless they can be boiled and made sterile.

Mice and rats may be caught in traps or with poisoned bait. Holes may be permanently stopped with galvanized tin or with plaster of paris mixed with ground glass.

THE WELL-FED FAMILY

Books to Be Used as References

Allen, Lucy G., *Table Service*, Little, Brown and Company, Boston

Allen, Lucy G., *Modern Menus and Recipes*, Little, Brown and Company, Boston

Bailey, Beth, *Meal Planning and Table Service*, Manual Arts Press, Peoria, Illinois

Blinks, R., and Moore, W., *Food Purchasing for the Home* (Revised), J. B. Lippincott Company, Philadelphia

Bogert, Jean, *Nutrition and Physical Fitness*, W. B. Saunders Company, Philadelphia

Bookmeyer, Mary B., *Candy and Candy-Making*, Manual Arts Press, Peoria

Byers, Jean, *My Better Homes and Gardens Cook Book* (Revised), Better Homes and Gardens, Des Moines, Iowa

Calvert, Maude R., and Smith, Leila B., *Advanced Course in Homemaking*, Turner E. Smith Company, Atlanta, Georgia

Chaney, M. S., and Ahlborn, M., *Nutrition* (Revised), Houghton, Mifflin Company, Boston

Cowles, Florence A., *1001 Sandwiches*, Little, Brown and Company, Boston

Cowles, Florence A., and Harris, Florence L., *400 Salads*, Little, Brown and Company, Boston

Farmer, Fannie M., *The Boston Cooking-School Cook Book* (Revised), Little, Brown and Company, Boston

Fowler, S. F., and West, B. B., *Food for Fifty*, J. Wiley and Sons, New York

Friend, M. R., and Schultz, H., *Junior Home Economics: Food*, D. Appleton-Century Company, New York

General Foods Corporation, *General Foods Cook Book*, New York

Good Housekeeping Cook Book, International Magazine Company, New York

Greer, Carlotta C., *Foods and Homemaking* (Revised), Allyn and Bacon, Boston

Gunn, Lillian, *Table Service and Decoration* (Revised), J. B. Lippincott Company, Philadelphia

Halliday, E., and Noble, I., *Hows and Whys of Cooking* (Revised), Cambridge University Press, Chicago

Harris, F. L., and Henderson, R. A., *Foods: Their Nutritive, Economic and Social Values*, D. C. Heath and Company, Boston

Harris, F. L., and Henderson, R. A., *Let's Study Foods*, D. C. Heath and Company, Boston

Harris, F. L., and Ridler, D. A., *Food 'n Fun for the Invalid*, M. Barrows and Company, New York

Harris, Florence La Ganke, *Flavor's the Thing*, M. Barrows and Company, New York

Harris, Florence La Ganke, *Pies A-plenty*, M. Barrows and Company, New York

Harris, J. W., and Lacey, E. V., *Everyday Foods* (Revised), Houghton Mifflin Company, Boston

Heseltine, M., and Dow, U. M., *Good Cooking* (Revised), Houghton Mifflin Company, Boston

Jensen, M. B., Jensen, M. R., and Ziller, M. L., *The Fundamentals of Home Economics*, The Macmillan Company, New York

Kander, L., *Settlement Cook Book* (Revised), Settlement Cook Book Company, Milwaukee, Wisconsin

Kinyon, K., and Hopkins, T., *Junior Foods* (Revised), Benjamin Sanborn and Company

La Ganke, Florence, *Patty Pans*, Little, Brown and Company, Boston

Lanman, Faith R., *Handbook of Recipes*, Ann Lanman, 1447 Fair Avenue, Columbus, Ohio

Lanman, F., McKay, H., and Zuill, F., *The Family's Food* (Revised), J. B. Lippincott Company, Philadelphia

Lowe, Belle, *Experimental Cookery* (Revised),[1] John Wiley and Sons, New York

Maiden, Rachel Bell, *The Canapé Book*, D. Appleton-Century Company, New York

Maltby, Lucy M., *It's Fun to Cook*, John C. Winston Company, Philadelphia

Mazza, Irma Goodrich, *Herbs for the Kitchen*, Little, Brown and Company, Boston

Monroe, D., Kyrk, H., and Stone, U. B., *Food Buying and Our Markets*, M. Barrows and Company, New York

New York Herald Tribune, *America's Cook Book*, Charles Scribner's Sons, New York

Perkins, Wilma L., *The Fannie Farmer Junior Cook Book*, Little, Brown and Company, Boston

[1] Teachers' reference.

Porter, Virginia, and Latzke, Esther, *The Canned Foods Cook Book*, Doubleday, Doran and Company, New York

Roberts, Lydia, *Nutrition Work with Children*, University of Chicago Press, Chicago

Robertson, Helen, *Merry Mixer Cook Book*, Frederick A. Stokes Company, New York

Rombauer, I. S., *Joy of Cooking* (Revised), Bobbs-Merrill Company, Indianapolis, Indiana

Rose, Mary Swartz, *Feeding the Family* (Revised), The Macmillan Company, New York

Rose, Mary Swartz, *The Foundations of Nutrition* (Revised), The Macmillan Company, New York

Rose, Mary Swartz, *Teaching Nutrition to Boys and Girls*, The Macmillan Company, New York

Sherman, Henry C., *Chemistry of Food and Nutrition*, The Macmillan Company, New York

Sherman, Henry C., *Food and Health*, The Macmillan Company, New York

Stone, Harriet, *The Meaning of Nutrition*, D. C. Heath and Company, Boston

Todoroff, Alexander, *Food Buying Today*, The Grocery Trade Publishing House, Chicago

Tressler, D. K., and Evers, C. F., *The Freezing Preservation of Fruits, Juices and Vegetables*, The Avi Publishing Company, New York

Trilling, Mabel, Williams, Florence, and Reeves, Grace, *A Girl's Problems in Home Economics* (Revised), J. B. Lippincott Company, Philadelphia

Wolcott, Imogene, *The Yankee Cook Book*, Coward-McCann, Inc., New York

Young, Hazel, *The Working Girl Must Eat*, Little, Brown and Company, Boston

Young, Hazel, *Better Meals for Less Money*, Little, Brown and Company, Boston

Other References

Bulletins from extension service of state universities such as:

- "Home Canning for Better Family Meals," Ohio State University, Columbus
- "Care of Meat in the Household Refrigerator," Research Bulletin 215, Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, Ames

Bulletins from commercial firms such as:

- "Meat Charts, Showing Wholesale and Retail Cuts," National Live-stock and Meat Board, Chicago
- "Nutritional Charts," Research Department, H. J. Heinz Company, Pittsburgh

"Calcium, Phosphorus and Vitamin D for Strong Bones," Irradiated Evaporated Milk Institute, Chicago

Bulletins from the Government such as:

"Diets of Families of Employed Wage Earners and Clerical Workers in Cities," Hazel K. Stiebeling and Esther F. Phipard, U. S. Department of Agriculture, Circular No. 507, 1939

"Meat Dishes at Low Cost," U. S. Department of Agriculture, Miscellaneous Publication No. 216

"Consumers' Guide," U. S. Department of Agriculture

"Homemade Bread, Cake and Pastry," Farmer's Bulletin Number 1775, U. S. Department of Agriculture

"Vitamin Content of Foods," U. S. Department of Agriculture, Miscellaneous Publication No. 275

Younger Crowd Fashions

Tweed is always good for a school coat. Girls, like boys, have plenty of things to carry in a pocket; hence, these four capacious ones will prove their worth. With a coat of classic lines should be worn a hat as simple as this.

American Bemberg Corporation and Trico Fabric Company

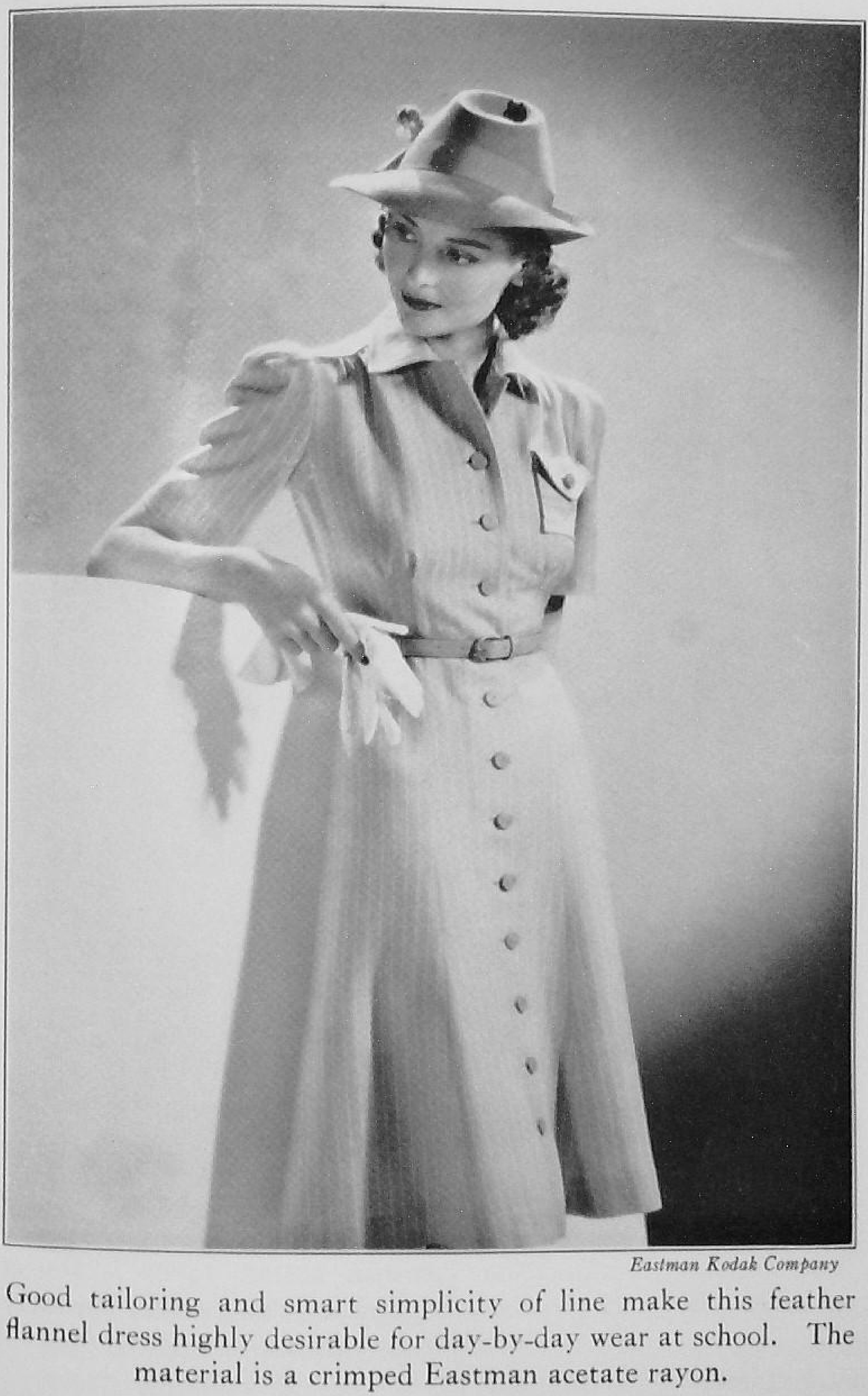
This dress with its attached hood may become a dress with cowl-like collar. It is made of Bemberg and acetate rayons in a tricot knit. The built-up shoulders and the fullness below the hips are excellent for girls in their teens.

Younger Crowd Fashions

The plain tailored blouse of acetate crêpe contrasts nicely with the jacket and skirt of tweed in a gay plaid. Inverted pleats at the center front and back of the skirt give desirable freedom for the activities of the high school girl.

United States Rubber Company

A rain coat of treated gabardine is waterproof at all points. The pockets are large with wide openings, so that handkerchief or purse may be reached easily. The pork-pie hat of gabardine matches the coat in color and ability to shed water. The boots have side openings which are easily closed with slides. Coming up as high as they do these Swedish boots protect stockings and keep feet dry.



Eastman Kodak Company

Good tailoring and smart simplicity of line make this feather flannel dress highly desirable for day-by-day wear at school. The material is a crimped Eastman acetate rayon.

Eastman Kodak Company

The check in this sharkskin Eastman acetate rayon is almost invisible. But it proves flattering and suitable for that Saturday noon luncheon down town.

Younger Crowd Fashions

Gray, yellow and white print of rayon is used for this dress which may be worn at the school tea. The skirt pleats are edge stitched, which simplifies the care of the dress. A bolero of yellow linen makes the outfit complete.

Geoffrey Morris
Courtesy of Mademoiselle and of the du Pont Company

The much-wanted flat and slim effect below the waist is achieved in this dress by placing the unpressed skirt pleats where they accentuate the slender waist. Du Pont rayon crêpe is used in the dress.

Eastman Kodak Company

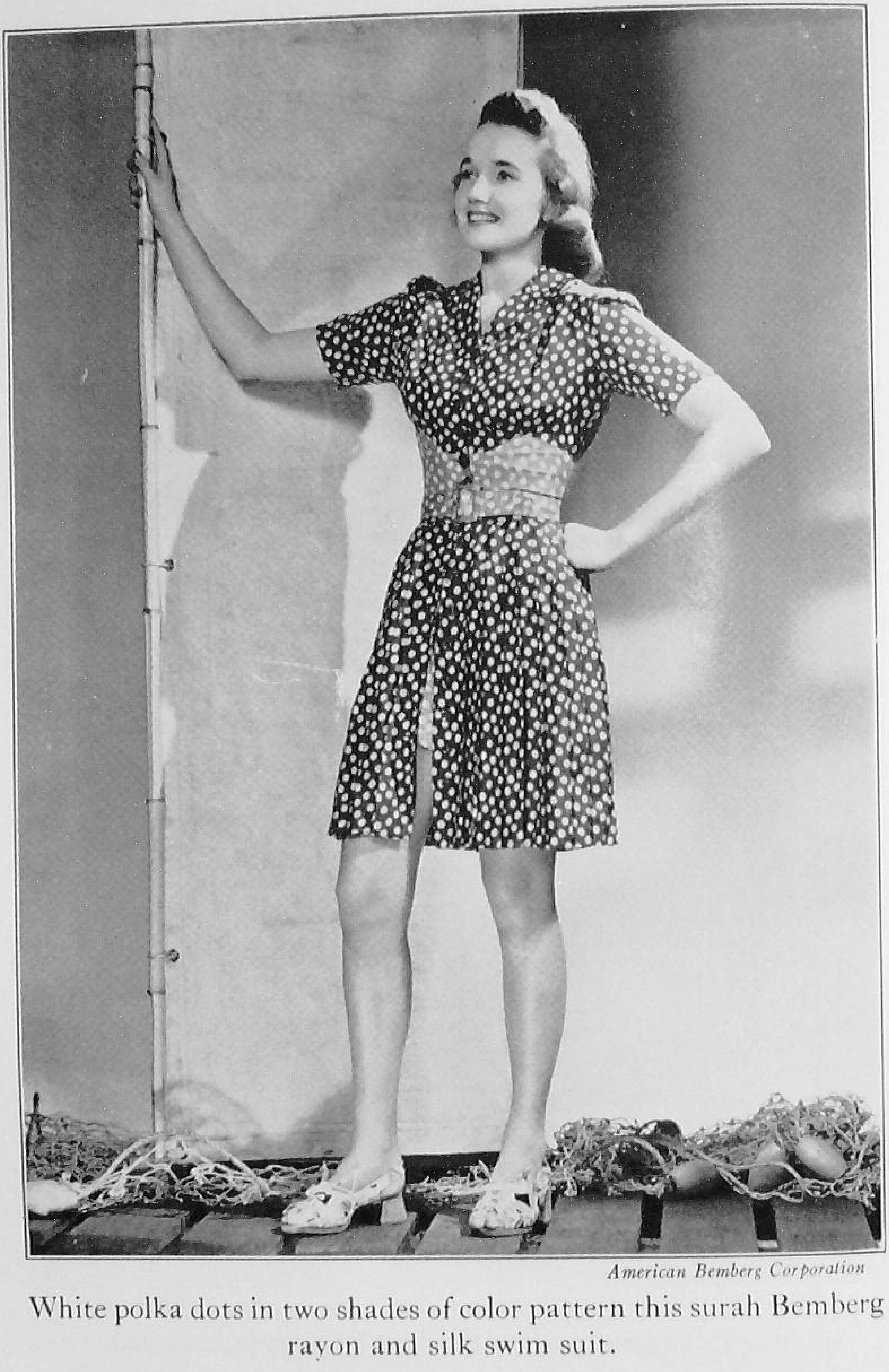
The chalk like stripes in the blouse contrast with the plain skirt. Both are made of feather flannel — a wool-like fabric of crimped Eastman acetate rayon. This dress allows freedom of action when walking.

Eastman Kodak Company

Eastman acetate rayon in washable shantung makes this outfit.

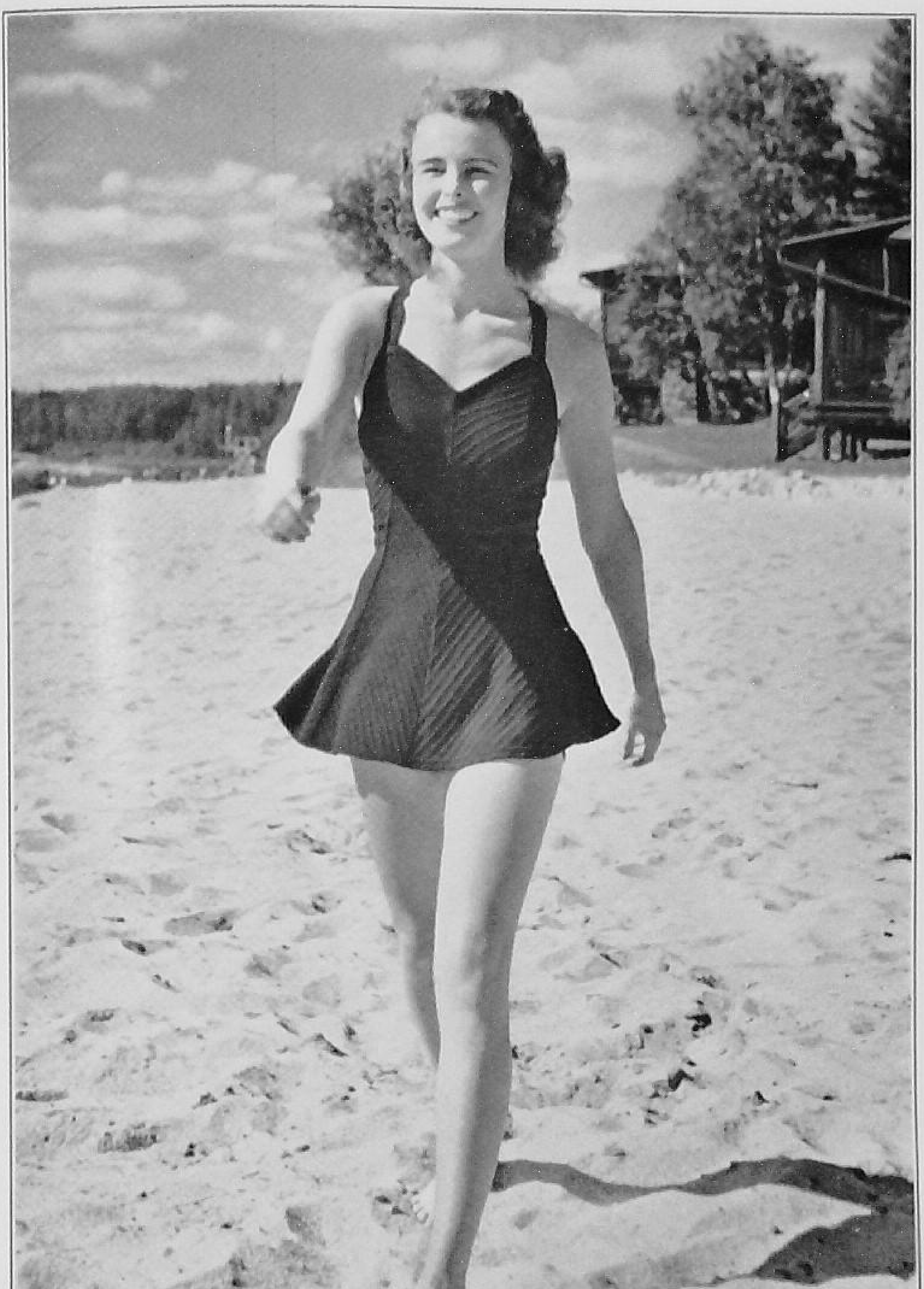
Eastman Kodak Company

A play suit emerges when the circular skirt is unzipped.



American Bemberg Corporation

White polka dots in two shades of color pattern this surah Bemberg rayon and silk swim suit.



Photograph from Minaki, Canada
Courtesy of Bureau of Fashion Trends,
June Hamilton Rhodes, Managing Director

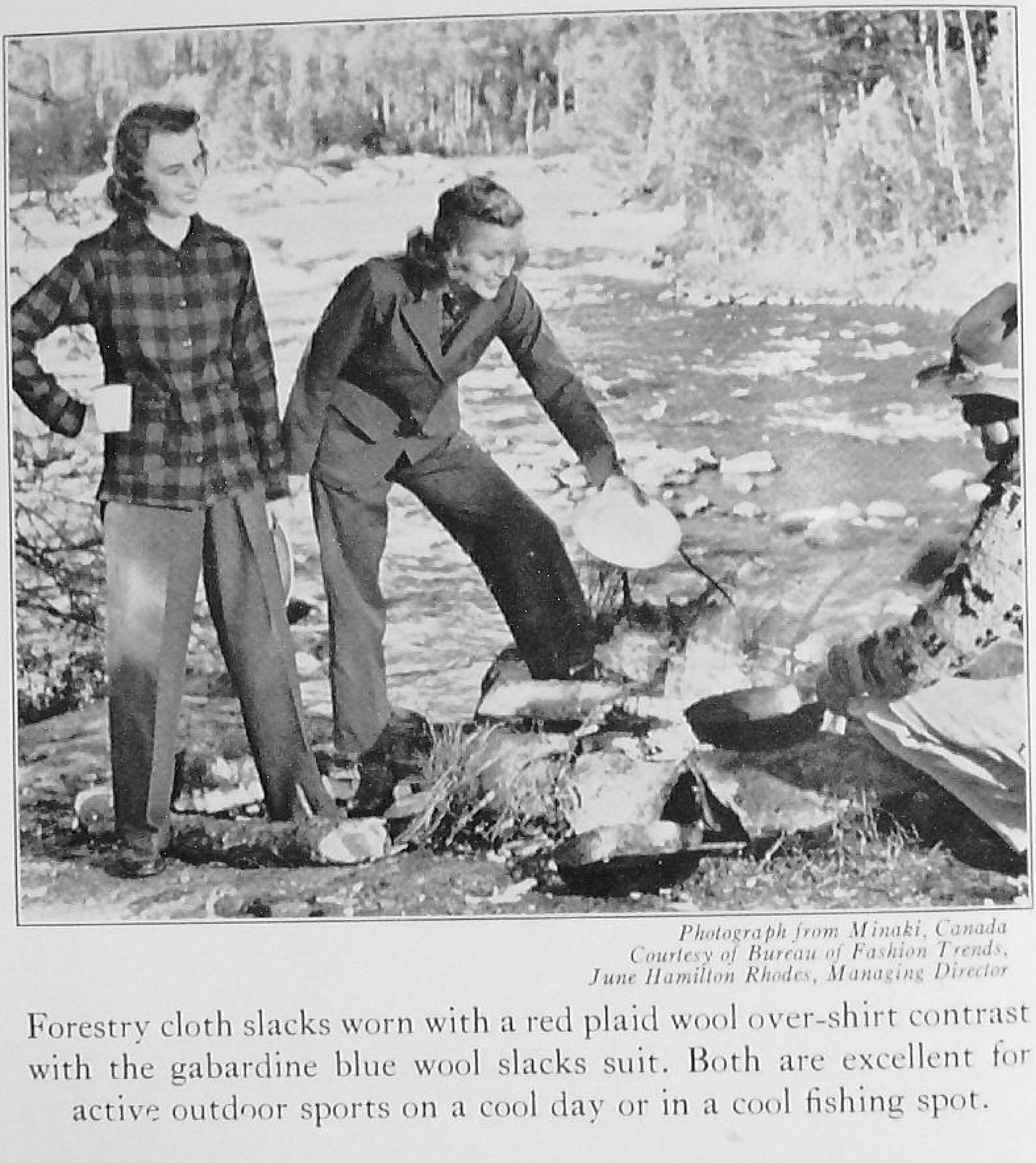
Wool knit bathing suit with ballerina skirt will keep this swimmer free from chills when she steps out of the water.

American Bemberg Corporation and William Skinner & Sons

A practical and becoming two-piece outfit is made of crush resistant rayon and silk in herringbone twill weave. The shirtwaist has simple lines. The skirt is stride-free, thanks to the inverted pleat at the center front.

Photograph from Minaki, Canada
Courtesy of Bureau of Fashion Trends,
June Hamilton Rhodes, Managing Director

White flannel tennis skirt well cut and full enough for tennis action is topped with a white cashmere sweater which, like the skirt, fits the hips tightly.



Photograph from Minaki, Canada
Courtesy of Bureau of Fashion Trends,
June Hamilton Rhodes, Managing Director

Forestry cloth slacks worn with a red plaid wool over-shirt contrast with the gabardine blue wool slacks suit. Both are excellent for active outdoor sports on a cool day or in a cool fishing spot.

Meyer Brothers, Inc.

Kentucky jodhpurs are smart when worn in any state of the Union. Made of cavalry twill in rust color they omit the customary peg top and use the bell bottom. The English tweed coat is of light tan.

Eastman Kodak Company

For country hikes wear slacks. These fit snugly at the waist but are cut so that becoming fullness comes below the waist. Slacks and a shirt to be worn in or out are made of worsted-type Eastman acetate rayon.

Gábor Éder
Courtesy of the du Pont Company

Crush resistant velvet of du Pont rayon is quite at home when worn to a faculty reception.

Eastman Kodak Company

When you are a freshman wear a dress like this to the after-school afternoon dance. The dress is made of Eastman acetate rayon taffeta.

American Bemberg Corporation and Jack Herzog

Slim bodice, full skirt, becoming neckline and cap sleeves are four fashion notes embodied in this party dress of Jacquard taffeta made of rayon and silk.

Eastman Kodak Company

This party dress may be called a picture frock, reminiscent of the Civil War period. Tiny waistline, enormously full skirt and dropped shoulders give an effect of an old daguerreotype. But the dress is made of modern Eastman acetate rayon.

International Silk Guild

Fresh and young in feeling is this deceptively simple party dress. Fullness is clustered at each side of the bodice, continuing below the waist. Fitted wristbands catch the gracefully full bishop sleeves. Silk chiffon in a soft color makes this soft and graceful frock.

Copyright The Bride's Magazine, 1940

Organdy over white taffeta is used for the dress of the young bride. Her bridesmaid's frock is made of pale pink figured organdy. The bride carries long stemmed roses in place of the more traditional bouquet.

II. THE WELL-DRESSED GIRL

GENERAL DISCUSSION

When did you begin to think about the dress you would wear when you were hostess at the Sunday night supper? Some girls consider dress so important that they wait until they have what they think is the right dress before they invite guests to their homes. Other girls attach less importance to clothes. They think about the "eats." And then there are girls who never will invite any one to the house unless everything in it is looking its best.

There is a fourth group who consider sociability of more importance than clothes, food, or house decoration. To which group do you belong?

If we talk at great length about clothes and the place they play in making you an attractive, charming person, don't think that we believe for one minute that clothes are the most important thing in the world. They are n't. But they can do a great deal to enhance you. A person who is well dressed, and knows that she is, loses a great deal of self-consciousness. She concentrates on people and ideas and forgets herself.

Being well dressed does not mean being expensively dressed, but more of that anon.

If you wear a dress that calls attention to itself, you are not being kind to guests who may not have as many clothes or as much money to spend on them as you do. If you wear a new dress when you are hostess, you are apt to be so conscious of it and so careful lest you spoil it that you become a mere stalking horse for your clothes. If you wear too elaborate a dress, you can't be an active and efficient hostess when you prepare hot chocolate, or cut bread for sandwiches, or pass the fudge.

After all, when you entertain, you and your clothes are in the background. You have invited people to your home to give

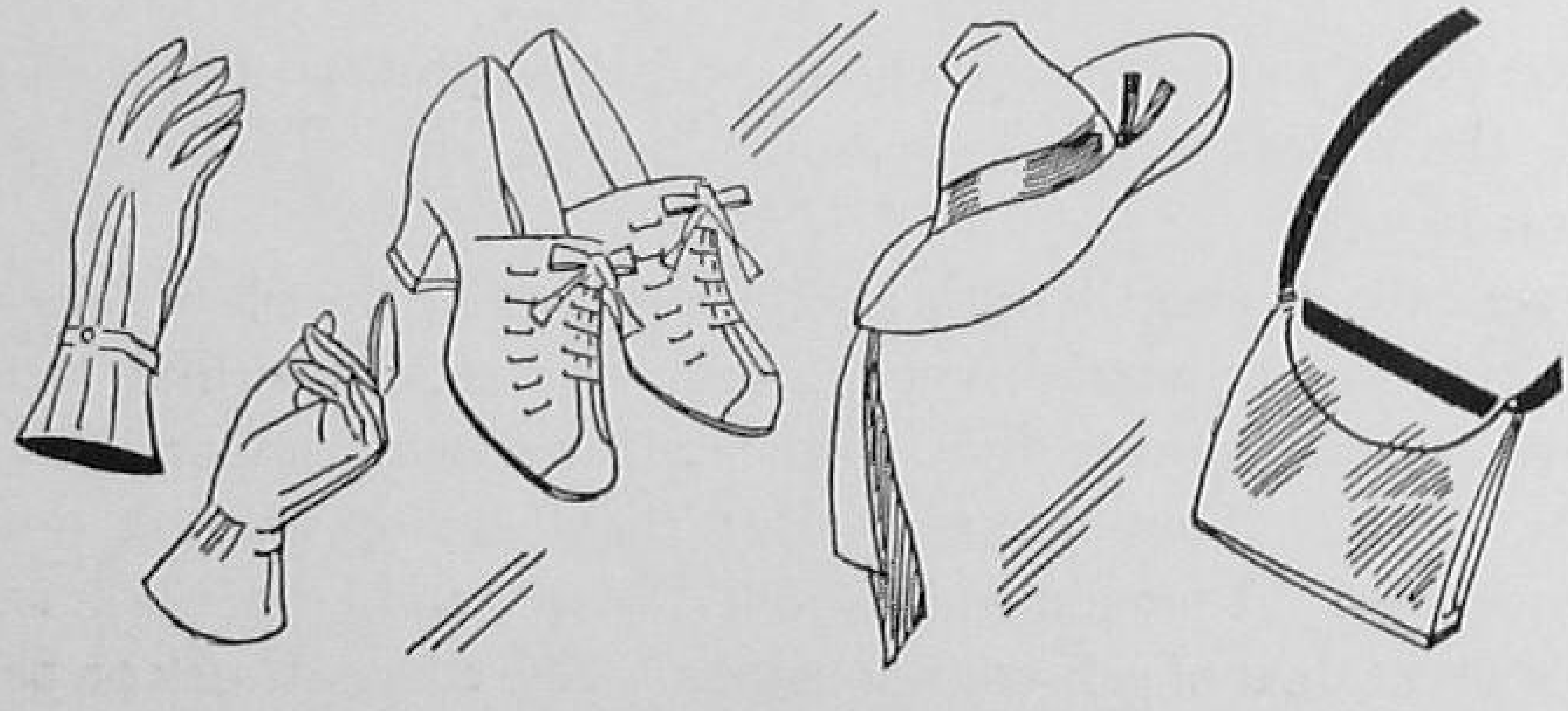
them the kind of good time that they enjoy, not to put yourself in a stellar rôle.

A girl who has taken courses in clothing construction in school stands a much better chance of being a well-dressed girl than the one who thinks she is too "high minded" to bother with clothes and their becomingness. Because, while clothing classes teach clothing construction, they also give knowledge of textiles, ready-made clothes, suitability of styles, fabrics, and colors.

That last phrasing does not sound alluring, but it really is, for when a girl knows those things, she knows how to be a person with individuality, charm, poise, graciousness. Clothes do all that for you and more.

UNIT 1. WHEN IS A GIRL WELL DRESSED?

The A B C D E of Dress



Let's consider the A B C D E of the well-dressed girl.

A girl is well dressed when she is *attractively* dressed. The best way to illustrate this is to point out the difference between looking like a vision and looking like a "sight." Both attract attention. When your brother tells you that your new hat makes "you look a sight", he is not being complimentary; but when he whistles and says, "Gee, Sis, you are a vision in that new dress," you preen yourself as if you really had the feathered wings of an angel.

A well-bred person never turns and stares at any one, but when you pass another girl on the street and almost forget your manners because you want to turn once more to see the neat way that dress sets off her coloring, when you wish you knew her well enough to ask her where she bought that coat (for you'd like one which is

as flattering to you as hers is to her), when you feel that way — you have seen an attractively dressed girl.

It is no compliment to you to wear clothes that make a man or a boy turn the head to look, and gape, and stare. Sometimes it would seem that boys' heads are hung on swivels, they turn so easily. But when you, a well-bred girl, want to turn your head to look admiringly at another girl, then you may be sure she is attractively dressed. The girl is a vision.

Boys' heads turn just as readily to look at "sights" as they do at visions. In fact a little more readily. Measure the attractiveness of your outfit by the looks of the girls and not of the boys.

A girl is well dressed when she is *becomingly* dressed. There are two aspects of this word. First, your clothes may actually become a part of you. Once you have them on, you forget about them. Such clothes do not call for continual pulling up of shoulder straps, poking down of ribbons peeping coyly up from the neck line, pulling down of skirts over knees, or pulling down of foundation garments every time you stand.

Clothes may be becoming because they make you appear at your best. The shape of your head, the slimness of your neck, the size of your waist and hips, the relation between your height and weight have a definite bearing on the clothes you choose. Or they should have, if you want to be good looking.

Hazel Cades has a most delightful book called "Handsome Is as Handsome Does." When you read it, you will see that she proves her point. She says you do not need to be pretty in order to be good looking. But she says, and rightly too, that your build, the size of your bones, must be taken into consideration when you choose a dress style.

Your coloring affects the becomingness of your clothes. If you are a blond or a brunette, you really have less choice than the in-between person who can wear almost any color if she selects it with judicious skill.

A girl is well dressed when she is *correctly* dressed. That means no satin slippers at a baseball game, no cotton middie at an evening dance. It means "swishy" clothes for evenings and perky clothes for sports. It means that a girl who wears second-hand finery to school deserves to fail in at least one subject —"what the well-

dressed girl wears." It means that aprons and smocks may be so well chosen that small brother will hang on your apron strings the while he wipes the dishes for you. There are tricks in all trades, and the right dress in the right place is an important one to master.

A girl is well dressed when she is *distinctively* dressed. Here is where you are most apt to fail, for you have n't had a chance to learn that distinction comes from within and seldom from without.

You think that the girl with fair hair and dark lashes, the girl with coal-black hair and clear complexion, the girl with long curling golden lashes has every advantage over you with your mouse-colored hair or your mediocre features. But you are wrong, really.

If you have a generous mouth and sunshiny smile, capitalize that. Be a sunny person in clothes as well as disposition. The girl with the sun-lit hair may have a discontented mouth. And discontent does not get you far.

Perhaps you have brown eyes that you think are "just brown eyes." Have you played them up? Do your clothes bring out the depth and richness of those eyes? The girl with green eyes may be jealous as a cat of her distinction, and just as scratchy.

Perhaps your hair is taffy colored. Try brushing and brushing and keeping it clean with meticulous care until it is a shining halo. This is really more attractive than the crow's nest of the red-headed girl who sits beside you.

Perhaps your asset is the "school girl complexion", the "skin you love to touch." Keep it so by cleanliness and the judicious use of cosmetics.

Actresses know enough to make an asset of a crooked smile, of a generous mouth, of downright homeliness. It is true that some women are so homely they are attractive. Such a woman knows enough to stay away from picture prettiness in the clothes she wears. The contrast between herself and her clothes would be too great.

Distinctive clothes help to high-light, to accent you. Perhaps you are large framed and wear barbaric beads or large pendants with distinction. Perhaps the frilly, filmy, ruffled dress is yours. Then choose it. Make your clothes do things for you. Make them bring out the distinctive "you" that sets you apart from Susy Jones across the street.

A girl is well dressed when she is *economically* dressed. That means more than it says on the surface.

Economical clothes are those that, costing much or little at the outset, cost little in upkeep after you begin to wear them.

Sometimes cheap dresses are so cheap that the fabric is sleazy, the seams pull out, the trimming frays, the material shrinks when laundered. No matter how cheap that frock was in the beginning it is not and never can be an "economical" dress.

Economical clothes are those that fit into your scheme of living. An elaborate evening dress for a girl who seldom goes to parties is not cheap even at the low initial purchase price.

A house dress for a business girl who is at an office all day and slips a smock or apron over her office dress when she gets home is not economical even though it cost but fifty cents.

A hostess gown of velvet trimmed with fur is never economical for a woman who gets up with the sun, works all day, and goes to bed with the chickens.

Dresses hanging unused in a girl's clothes closet are not paying their rent, let alone paying for their initial cost.

If a dress costs little but has an accordion-pleated skirt that can be taken care of only at the commercial cleaner's, the ultimate cost of that dress is high.

There are times, too, when clothes costing a great deal in the beginning continue their cost until they are discarded. Years ago Ellen H. Richards gave a case in point. This was written when underwear was underwear — ask grandmother, she'll know what is meant: "It has been found that the cost of laundering an elaborate lace-trimmed suit of underclothing — three pieces — for one year is $81.00. Its original cost is $13.40.

"For a simple suit, wide hem, tucks in the skirt and a little embroidery on the corset cover, the laundry for one year is $47.00; original cost, $4.50."[1]

From these figures the conclusions are reached that simple underwear is far more economical than that which is elaborate; also that the first cost is small, in either case, compared to the cost of maintenance. Some years ago an automobile company used

[1] "The Cost of Living," Ellen H. Richards. (Out of print.) John Wiley and Sons, New York

this slogan, "What comes after the purchase price?" There is the answer to economical dressing.

There is another point to be considered in purchasing clothing. If you can afford a coat but once in three years, you are foolish to buy a coat with decided color or high note of fashion. That fashion note dates your coat. The color remains fixed in observers' eyes. They say, "Oh, yes, I recognized you way down the street. I saw the coat and knew it was you."

But you protest, "You just said that clothes should be distinctive and bring out my good points. I need vivid henna to appear at my best. I am washed out in black or sallow in dark blue."

The answer is this: "Choose the serviceable blue or black for your clothes themselves, but add the interest in your accessories. They may be beads, a gay handkerchief, the trimming on the dress, the tie worn with the middie, the gay colorful beret." You can change these frequently, for they are not as expensive as the coat. And, anyway, distinction should be vivid, fine, precious, not as broadspread as a brick wall. It's too bad for you and your personality if you require yards and yards of material to set you off.

> But what we wear — O dearie me! —
> Is naught but a patch upon what we *BE*.
> And rags and tatters often hide
> A brave little body bunched up inside.
> And one thing's certain; nobody knows
> The Good from the Wicked by just their clothes.[1]

Grooming and Posture

If by well dressed we mean "giving a good impression", then we immediately broaden our subject to include the matter of personal grooming, carriage, or posture.

In general, it is true that you have to be able to see beauty before you set about making it your own. That is not quite true, for there are girls who are born beautiful. They have the advantage over most of us. But that does not mean we need to sit back and mourn and say, "It's just no use. My hair is straight and fine and thin. My mouth is large. I have to wear glasses. I have a receding chin. I have 'buck teeth.' I have a turn-up

[1] From "A Child's Day," Walter de la Mare. Henry Holt and Company

nose. Some girls have all the luck. Look at Edna with her red hair, Jane with her dimples, Margaret with her naturally wavy hair, Virginia with her rosebud mouth and teeth like pearls. No boy will ever look at me and I'll never, never be asked to join a sorority or a club."

Well, if you feel that way about it, you probably won't!

There may be some truth in Dorothy Parker's trenchant comment — "Men seldom make passes at girls who wear glasses" — but do you want that sort of thing? Do you want to be ogled and pursued? That is n't your highest desire really, is it? When a boy says "Gee, but Martha's a good sport. She does n't crab. She does n't nag. She is n't always afraid that the sun will give her freckles. She can play a 'neat' game of bridge, and she wields a mean hand at tennis," he is not saying anything about golden hair or dimples or ravishing smiles.

We'll grant that a boy does n't want to take a "sight" out with him, but you don't have to be one, even if your hair is straight. You can learn a way to keep your hair from straggling, your nose from shining, your dress from sagging and making you look dumpy. That knowledge is available, if you want it badly enough. The trouble is that some girls feel they start under a handicap and won't do a thing about it.

And then there are girls who get all excited over making beauties of themselves. They buy cosmetics, take exercises, have at least two baths a day, and keep it up for just about one week. Then they lose interest. They get discouraged because the beauty of the rose does not emerge instantly or they don't care enough about being good looking to make the effort.

Any girl can be good looking if she wants to be, wants it hard enough, goes at the process intelligently, and keeps at it assiduously.

You don't suppose that the girl who is born a beauty sits back and lets nature take its course, do you?

She spends hours dressing and getting ready for the dance. She spends hours protecting and beautifying her complexion. Her beauty has to be cherished. But would n't it be a strain, always considering your beauty and taking care of it? Would n't it be stupid?

It will pay you to study novels and to see what characteristics the authors, who are usually men, give their heroines. Quiet, lily-white hands, beautiful eyes, mystical smiles, always charm.

Your hands may be capable, square-fingered ones. But they can be quiet; not uneasy things that are never still, that hover over a boy, picking imaginary threads from his coat.

Your smile may not be mystical, but it may be jolly. And charm may be found in a crooked smile, or in eyes that light up a face, or in a queerly arched eyebrow.

Again, you see, it is the inner "you" showing through the outer covering.

You may have the best-looking clothes in the world, the kind that fairly shout "Paris" at one, but if you slouch when you wear them, they might just as well have come from the second-hand store.

And so we come to the foundation on which you put your clothes — your body.

Bodies may be things of beauty with grace and flowing lines. They so seldom are, that 's the pity of it.

That is because you don't know how to stand correctly, because you wear the wrong kind of shoes and stockings, or because you choose to wear no foundation garment — or the wrong kind.

Correct posture is the one which pulls the buttocks in, takes the hollow out of the back of the waist, holds the head up, plants the feet straight out and parallel in front of one.

Stand like this and walk with the swing coming from the hips, think of your body as a series of beads strung on a flexible wire, and you have attained good posture.

When it comes to foundation garments, you may think you need none. You may turn up your nose scornfully at the corsets your great-grandmother wore. The modern girl or woman no longer wears such corsets. She chooses a flexible material which binds her in no way at all but gives support to tired muscles. The muscles can support you more easily with less chance of growing tired in middle age if you give them a little help now. Consider the simple girdle, not a whalebone in it, not a corset string to be seen!

The last year or so has brought a material into the garment world

that has a so-called "two-way stretch." The advertisers say that a foundation garment of this material is marvelous, that it flattens out bulges, makes becoming curves, and flatters the figure. They say it is comfortable to wear and easy to launder. Regardless of their claims these garments have disadvantages, especially for the girl with slender hips and a slightly rounded abdomen.

The two-way stretch compresses the hips into the smallest possible space and the rounded abdomen is squeezed farther forward, not spread out and flattened. As a result the curve becomes a bulge and the figure is not improved. If hips were large, using the side-wise stretch as well as the up-and-down one of the material, the garment would be kinder to the figure.

When you are growing as rapidly as you are, your muscles grow tired. The first thing you know, you slouch and let down. A girdle counteracts that tendency and keeps you in better shape for the years ahead of you when you will get what many women dread — "the middle-aged spread." That comes because muscles are less youthful, because the older woman does less exercising, because she eats too much for the bodily exercise she takes. She won't agree with this statement, but it's true. You are warned in time, so keep your muscles young and firm and well exercised and don't, don't slouch.

The middle-aged woman is not quite so apt to be foolish about the shoes she wears as you are. That's because she won't endure pain as willingly as you do.

When you stop to realize that frowns, short tempers, whining voices are only too frequently the aftermath of badly fitting shoes, you may be willing to choose shoes more sensibly.

A sensibly shod foot is an attractive foot.

How can any girl think that a foot looks nice when it puffs out and spreads all over the edge of the pump, or bulges between straps?

Surely no girl in her right senses wants to thicken her ankles and throw them out of line as is done when she stumbles along on high heels that pitch her body forward.

No girl would think of walking on run-over heels if she really saw the queer swing it gave her body. That isn't an uncommon sight, merely an unobserved one. Watch the people who walk in front of you next time you are on the street.

If Cinderella were living to-day, her feet would not fit into the traditional glass slipper, for all women's and girls' feet have grown larger in the last fifty years. But if your feet never could have been called Cinderella's, then choose inconspicuous shoes and your feet will not be observed. It is the shoe out of scale with the person who wears it that becomes noticeable. And that holds whether the shoes are too small or too large.

Don't you hate to hear feet come plopping along or slopping along? The person who walks that way has n't a supple foot. How supple is yours? How many times a minute can you pick up a marble with your bare toes, drop it, and pick it up again?

How many times can you rise on your toes and sink back, rise and sink back without tiring your ankles? How well do you walk Indian file with one foot placed immediately back of the other, not "toeing out" but "toeing in" just enough to bring the weight on the outside of your feet?

There are girls who can't wear a high-heeled shoe with any comfort and there are others who are in misery with a heelless sandal. But both of these girls know enough to wear a shoe with a medium heel when they are dressing for an evening party. Any girl with sense chooses a heel that is bigger than a pin point. Countless angels may have been able to balance themselves on the head of a pin, according to ancient theologians, but not one girl can honestly balance her body on a spike heel. It's a far cry from the walk of a person on stilts to the graceful flowing walk of a goddess whose feet almost spring as they touch the earth. Ever hear of a flat-footed goddess?

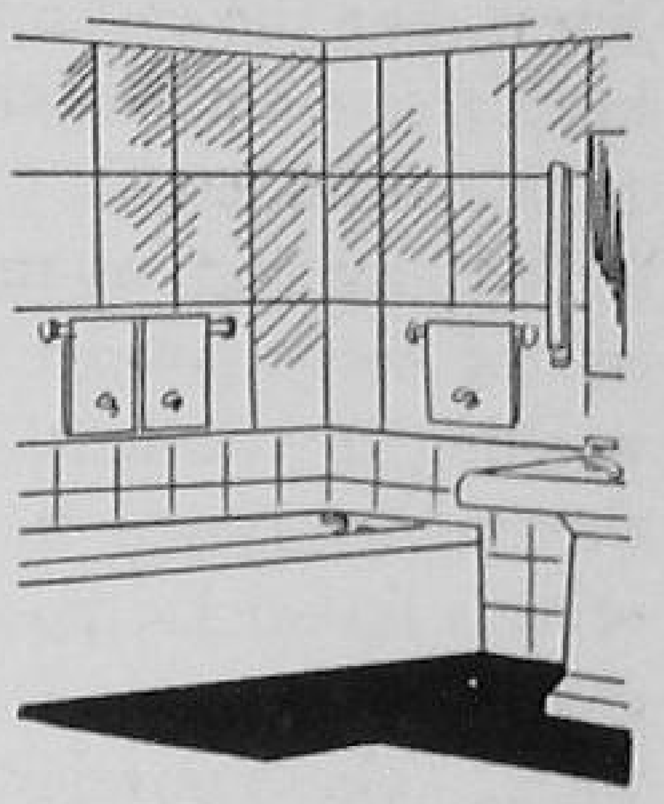
Stockings affect your comfort to a lesser degree than do your shoes. A stocking foot one-half inch longer than the flesh-and-blood foot is comfortable and wears longer than the too long or the too short one.

Just a few more points about this body of yours.

It needs to be kept clean, both inside and out. Notice how much more supple you feel when you are freshly tubbed than when you get ready for your bath.

The skin is softer, smoother; the muscles are not so tied up in kinks. Your forehead does not have that screwed up, wrinkled look.

Warm baths allow you to relax. Cold showers and sprays waken and stimulate. Some girls cannot stand the shock of a cold bath or shower. Avoid them unless your skin reacts in a healthy glow. But substitute warm-water showers for cold. Don't go unshowered and unbathed.



Remember how sweet a freshly bathed baby smells. Compare that with yourself after you have been working hard or playing hard in the sun and are covered with perspiration. Compare that baby smell with yours when you have been cleaning the attic or cellar and are grime from top to toe.

There are people who think they can kill a body odor by using strong scents, perfumes, toilet waters, sachets. But they fool only themselves.

You may not be able to buy expensive toilet waters nor spray yourself with perfumes, but you can look clean, and smell clean, and be clean. Some one has suggested that you compare yourself to the sparkling water in a brook, to the crystal ice, to the leaf of crisp green lettuce. These need no toilet water sprayed on them to make them fresh and clean.

Your fingers may not be tapering with almond-shaped nails, but at least your hands can be clean, the nails can be well kept, showing the crescent at the base of each. You may want — let's hope you don't — the brilliantly tinted nails that are in fashion now. Those nails are too theatrical for attendance at classes in history or geometry. Such nails are out of place on grimy hands. They call attention to bluntly shaped fingers. Nails with high luster are theatrical, too. Hands are well bred and inconspicuous only when they are well kept, with nail-cuticle pushed back, when the nails are not bitten to the raw nor sharpened to a claw-like fang, when hang-nails do not proclaim to any intelligent observer that your hands and nails have been neglected.

We started with a discussion of feet, we worked up to hands. Now we come to the face, or should we just whisper, "Clean neck, even behind the ears," before we reach the face and hair?

It would be comforting to know that intelligent eating, regular bowel elimination, daily cleanliness, would assure a girl a beautiful

complexion. Theoretically, that should be so. But actually, it is n't; not always, that is.

There are stubborn cases of acne that only a doctor can cure. The girl has to help him by observing diet, elimination, and cleanliness, but the cause may be deep seated. Oily skins are hard to keep free from blackheads and shine. Dry skins are susceptible to fine wrinkles.

But any skin, no matter what kind it may be, is harmed by the use of dirty powder puffs, make-up that is left on over night, washing in too hard water, washing in soapy water that is not thoroughly rinsed from the face. There are girls who use each other's lip sticks, powder puffs; who wear each other's hats and gloves. There is a lack of niceness and fastidiousness in girls like those. One's powder puff is and should be one's own and no other person's. Passing a personal compact to another girl and letting her rub her powder puff over it is as bad as using a family toothbrush or wash cloth. It is n't done. Not by a "nice" person.

And then, your hair. Well-cared-for hair is not beyond any girl. You may not have the skill or seeing eye which tells you how to arrange your hair becomingly, but you can study and ask advice. You can go to a beauty shop and have your hair shampooed and dressed. You might have a manicure, too. Then, having kept your eyes open while being "made beautiful", you can give yourself treatments at home. And you need n't look "home made" either.

If you have your hair "done" at a beauty shop or if you fix it yourself, try to avoid the "set" sculptured look that used to be in fashion. Nowadays the permanent waves are put in loosely, naturally. The "marcel" is not as tight and marble-sculpture looking as it used to be. The round curl is not as tight, nor the day-after effect as frizzy as it was a few years ago.

Try to get soft waves falling loosely and naturally about the face. By loosely, we don't mean frowsily. There is a difference.

Remember there are some faces that never were planned to be framed in waving hair. There is distinction in straight hair brushed to a sleek, shining beauty. Fit your hair dressing to your personality and your profile.

Are you all ready now to pass the personal grooming test? Wait,

one last question — what about your breath? Is it unpleasant? Don't trust to a mouth wash. See a dentist, a doctor, or both.

Have you a supply of a deodorant powder that will absorb body odors which bother girls and women every so often?

What are you doing about thin stockings and hairy legs? You'll have to avoid one or the other. If you decide to have smooth-skinned legs and smooth hollows under the arms, be careful in your choice of hair removers. There are depilatories on the market that are poisonous. Makers of all beauty products say that women cannot be trusted to read and follow directions. Certain cautions must be observed even with the most harmless of remedies. Rest assured that the maker is taking no chances but is telling you in plain language on the package what you should and should not do. If you get poisoned or infected, the manufacturer can always say, "If she had looked at the directions as given, and followed them, she would have had no difficulty." Manufacturers despair of ever teaching women to read and to obey. But possibly they have forgotten this bright generation that you represent.

Relating the Line of Your Clothes to You

We may as well take for granted that, in the main, the lines of you are fixed. That does not mean you can't soften an angular line by putting on a few pounds and gaining a curve thereby. It is possible to change a bulge into a graceful curve by dieting and exercise. But, in the main, your line has been set by the size and shape of your bones.

You can't make yourself shorter or taller or less droopy shouldered, but your clothes can make you appear so. Clothes bear a fairy godmother relationship to you.

For instance, if you are tall, you wear a wide hat and the contrast of the lengthwise and crosswise lines makes the observer think you are less tall than you are.

You can build up drooping shoulders with epaulets, or puff sleeves, or ruffles, and make the observer think you are an upstanding girl.

You can place the lines of trimming on your skirt in such a fashion that the eye is carried up and down, making you seem much taller than you really are.

You may use a round neck line or yoke and accentuate your round face and short fat neck until people think you are a roly-poly dumpling, or you can make the neck line a "v", or a draped cowl. Then people admire the way your head is set upon your shoulders.

You can choose a bouffant skirt that makes your waist look smaller than it is and your hips look larger.

Going on that principle you can say, "Well, if a bouffant skirt makes my hips look larger and they are too large now, why don't I make the skirt form fitting at the hips and then they will appear smaller?" But they won't, because that form-fitting continues above and below the hips and makes them stand out in bold relief.

Just as too small shoes make feet look larger, because the bulge has to go somewhere, so too tight clothes make the body appear larger because every line and curve is outlined.

The tall girl needs to avoid skirts that sweep to the ground, especially slinky skirts, for they accentuate every inch of her height. She needs shorter skirts with ruffles or lines of trimming breaking the long lengthwise lines.

Conversely, the short, thin girl needs long skirts with ruffles. If she is short and plump, she needs long, full skirts without any ruffles or crosswise lines of trimming.

In other words, line should carry the eye of the observer up and down for the short girl and across for the tall girl. There are exceptions to this rule, but in general it is true.

If a blouse is of one color and a skirt of another, there is a definite break that makes the short girl seem shorter, which is unkind to her; it makes the tall girl seem shorter, which is kind to her.

Say to your clothes, "You are my servants. You are to bring out latent beauty and to do my bidding." Don't let your clothes dominate you and make you seem less important than what you are wearing. Don't let your clothes be unkind to you.

It would be nice to be able to lay down definite laws for the correct placement and the shape of neck lines, arm holes, sleeves, waist and hem lines. But beyond this one statement — "they should all be kind to you" — there is not much to say, for fashions have a way of changing and making follies out of us if we are not careful.

How can neck lines be kind? They need to be considered in relation to necks, heads, hair, and shoulders.

A short, fat neck on broad shoulders needs depth and narrowness to counteract it. For the slender-necked girl with narrow shoulders the line should be shortened and widened. It all seems so obvious that you'd think any girl would know these things, just as she knows enough to come in out of the rain, but look at the dresses the girls are wearing to-day in class — do they know these fundamental facts, or if they do, have they practiced their knowledge?

A long, narrow face with hair parted and plastered down close to the ears and over the temples is made almost a caricature by a deep "v" in neck line and sleeves set well up on the shoulders.

A round, fat face with curly hair bushing out at the sides is not improved by a round-neck yoke and puffed sleeves. A butter ball comes to mind at once.

Neck lines may be round, square, "u" shaped, "v", bateau, cowl, tied under the chin, cut down almost to the bust line. As a rule the high neck line is more youthful. Only a young thing like yourself can manage scarves tied under the chin, or the stand-up narrow collars with small cravat tying under that. The bateau line is fine for the person with pretty shoulders and skin. It does not belong on the girl who has rolls of fat under her chin, at the nape of her neck, nor does it look well on the girl who has prominent collar bones or ledges of bone that stand out like shelves.

If a neck is n't pretty, it is better to cover it or to work with it until it is attractive. Let your mirror be your guide, not the current fashion.

Round neck lines belong on the young girl with the pretty neck. U necks give an opportunity to use a flattering lingerie touch. Square necks may be young and girlish or, if cut deep and rather narrow, they have a sophisticated, almost queenly air. Bateau and cowl neck lines are soft and flattering to most faces. V necks are too often the only resource of the older woman.

No matter how fashionable padded shoulders, or leg-o-mutton, or puff sleeves may be, they do not belong in the wardrobe of any short, stocky person.

Neither are ruffled berthas happy on her. Nor on any broad-shouldered girl, for that matter.

Sleeves should look as if they were an integral part of the dress. Sometimes they look like an after-thought. The same thing is true of many belts. Take a short, plump girl, put a wide shiny belt around her, at her exact waist line, and you make her seem shorter and plumper than ever.

Take a tall, plump girl and put a narrow string belt about her middle and her size is accentuated. Belts of self-material placed slightly below the normal waist line are usually the most satisfactory.

We spoke earlier of the long, sweeping skirt on the tall girl. One might think that only a short one should be worn. But a too short skirt defeats its purpose.

The correct skirt length is the one which is kind to the wearer.

As a general rule we may say this — avoid extremes of any sort. Just because a style is a fashion does not mean it will not be a folly for some wearer.

Relating the Color of Your Clothes to You

Here are two more pieces of advice for you: consider your coloring and your type when you choose your clothes.

There used to be one dogmatic rule for all colorings — "dress up to your eyes." The colorists who laid down this law said, "When the eyes are blue, wear blue. When the eyes are brown, wear brown." It's a good rule, made mostly to be broken.

If only there were n't so many shades of blue and so many shades of brown! A yellow brown may bring out every bit of sallowness in your skin and a red brown may give your skin the warmth and texture of old ivory. But the colorist did n't tell you that.

The colorist forgot to mention the effect of color on your complexion — and on your size.

The seasons of the year have a bearing on the color.

The colorist forgot to say that textures affect color. For instance, red in chiffon is one thing, in velvet it's another, and in red flannel it's still a third.

The dogmatic rule neglects to state that you may need to play up your hair rather than your eyes. Nature may have given you nondescript brown eyes but glorious red hair. Then it's your hair that is the keynote.

There is a rule which fits all cases. It is this: the correct color for you is the one which is kind to you.

Would n't it be splendid if there was a dress consultant in your town, a person to whom you could go and say, "Here I am. Please study me. I don't know anything about color or type or clothes. Please do something for me so I will be good-looking, or if you can't do that, please make me distinguished looking"? If there was such a person, she would take you into a large room hung with mirrors and she would show you various lengths of materials, various textures, and many different hues and shades. She would try first one on you and then the next one, and so on until she did find the one that made you glow as if with an inner light. Then she would say, "There is your color."

She would n't have a thing for sale, for if she did she would be but human if she tried to dispose of some old stock and save herself a loss. No, the dress consultant has nothing for sale but her services.

It is quite possible, however, that you can do this kind of work right in your classrooms. Doubtless your instructor has large swatches of all kinds of materials. Have her try them on you. Get the reactions of the rest of the class. When they shake their heads in a decided negative when you try the strawberry pink that your soul longs for, be wise enough to abide by their decision. They see you as you are, but you look in the glass and see yourself as you would like to be. That's why it is so hard to pick out clothes for one's self. One's eye always sees Greta Garbo, or Marilyn Miller, or Helen Hayes, or Katharine Hepburn, or Katharine Cornell in the mirror instead of plain Martha Smith.

Here are a few hints to help you:

White, dead pure white, is hard to wear. Off-shades of white, putty, oyster, old ivory are easier. Remember that when you choose your wedding dress. No wonder brides who wore the fashionable pure white satin of the nineties looked sights and not visions of loveliness.

If you are a pale, nondescript sort of girl, don't put yourself out of the picture by swathing yourself in brilliant colors. But don't be so foolish as to choose mousy inconspicuous ones. Have some bright touch somewhere and repeat the note elsewhere in the costume.

Unless you are pert and vivid yourself be careful of too flaming colors.

If you are a blond, be careful of harsh, hard-surfaced textiles. They tend to make the wearer seem hard, coarse, and almost common.

If you are sallow, don't choose too vivid colors. They bring out all the yellow in the skin. Rich dark red, dark green, tawny henna, but not crude orange, deep bright blue, are kind to girls of that type.

You need to consider repetition of a vivid color in sharp small accents.

Proportion and balance affect the pleasing effect of a costume. That tells you where you should use a light and a dark material and which is better for a skirt and which for a blouse.

The red-haired girl, like the blond, is apt to have a soft, delicate skin. She should avoid harsh, shiny textiles. Crêpes and soft, finished materials are kinder to her than satins and hard-finished twills.

If you are a large, statuesque Juno, choose plain, rather somber colors. Don't get discouraged too early in the game, for your day is coming soon. Wait until you are president of the woman's club, leader in community activities, and you will be repaid. The little "cute trick" who makes life miserable for you now never seems to have enough authority about her in later years to be a leader in the community. Honors just naturally gravitate to the stately woman with avoirdupois and brains. Please note we call her stately and not ungainly. How about some exercises to give your body more grace?

No girl, it does not matter whether she be large or small, blond or brunette, or in between, would think for one minute of wearing wispy chiffon over bulging tennis muscles or sunburned back. No well-dressed girl would think of such a thing.

Remember, too, that you can't go against your line, your type, and your coloring. With a windblown bob and upturned nose you just can't be demure, shy, and retiring. With the lines of a scow you can't transform yourself into a canoe. There's no use making yourself miserable nor trying to make yourself over. Remember that and make the most of yourself, your line, and

your type. "Be your type" may sound like slang, but it's the best advice your authors can give you.

SOULS

My Soul goes clad in gorgeous things,
Scarlet and gold and blue.
And at her shoulder sudden wings
Like long flames flicker through.

And she is swallow-fleet, and free
From mortal bonds and bars.
She laughs, because Eternity
Blossoms for her with stars!

—O folk who scorn my stiff gray gown,
My dull and foolish face,
Can ye not see my Soul flash down,
A singing flame through space?

And folk, whose earth-stained looks I hate,
Why may I not divine
Your Souls, that must be passionate,
Shining and swift, as mine? [1]

Relating Accessories to the Rest of Your Clothes

When we come to accessories, we have two things to consider. First, does the accessory really "do" something for the outfit or is it merely "another thing"? Second, are we wearing it when it is the high style of the moment or are we trailing along with it months after it has been accepted by the fashion-right people?

Accessories need to be timely and in fashion if they are to be worn at all.

Gloves. With a period frock, lace mitts or gloves of velvet may complete the costume. They are an accessory in this case. But at any other time gloves are worn to cover and protect the hands from weather and infections. You would be surprised to know how many infections are carried by one hand being laid on a spot where another hand has been but a short time before. And until you watch people's uneasy hands you fail to realize how apt hands

[1] From "Myself and I," Fannie Stearns Davis. By permission of The Macmillan Company

are to stray near a person's nose, face, lips, skin. Just sit back to watch some day.

A well-dressed girl avoids tight-fitting gloves, for here again the too good fit forces plumpness to evidence itself somewhere. A fat pudgy hand is not any prettier than a foot bulging up between the straps of a shoe.

Gloves may be of lace, silk, velvet, cotton, lisle, materials woven with "lastex", synthetic materials, leather — either glacé, suède, pigskin, or calf. Gloves may be washable or be the kind that goes to the dry cleaner. But whatever type they are they should be clean when worn and of a color and texture that are suitable for the outfit and occasion. A bushy fur coat does not call for lace gloves. A dance frock and pigskin gloves are not harmonious.

Stockings. Increased participation in out-door sports and decreased supply of silk, nylon, and rayon stockings have brought a new trend in leg coverings. "Liquid stockings" made by applying an opaque liquid take away the pallid look of bare skin, giving it a sun-tanned appearance. Such covering is acceptable when evenly applied over smooth, fuzzless skin. The coating should extend well above the skirt hemline and below the top edge of shoe or sandal. When socks are not worn, the lining of the shoe is protected by wearing a washable cotton foot covering.

Stockings are full fashioned or seamless. The first is the better since the ankle is shaped when the stocking is being woven.

All textbooks tell you to wash stockings every night, but the cheapest stockings do not stand such treatment. It is true that perspiration is hard on the textile and rots the material if allowed to stay in, but, on the other hand, some cheap stockings cannot stand nightly laundering, no matter how carefully it is done.

We are interested in this discussion of stockings as a part of the costume. They should be in keeping as to texture and should be subdued in coloring. And have you seen light stockings after a walk outdoors on a rainy day? A cotton wash dress does not call for silk stockings. A heavy tweed outfit is spoiled by filmy silk hose. A dainty silk dress loses part of its charm if worn with heavy ribbed woolen ones. It is a case of fitting suitability of all parts of the costume together to make a complete picture. A piece from one jigsaw puzzle may fit into an empty spot in another puzzle

but unless it belongs there the effect is spoiled. The same is true of stockings.

Shoes. It is equally true of shoes. The stout brogue or walking shoe looks altogether too stout when worn with a filmy chiffon dress. White shoes with a dark dress make the feet stand out like foot-lights. Fit the shoes to the outfit, remembering that a dark plain shoe is the least conspicuous of any that you can choose.

Handkerchiefs. Handkerchiefs are necessities. But made as they are to-day they have become decorative accessories as well. Consider the huge square chiffon with rhinestone ornament. That handkerchief would be of little use when you had a cold in your head, but it might have allure enough, carried with the right outfit, to cure an ache in the heart. Sports clothes are the right background for the huge checked or plaid handkerchiefs. An afternoon party calls for a well-bred, dainty white handkerchief without too much scent or too much lace on it.

But no matter when the handkerchief is carried, even in the dead of night in the pocket of your pajamas, that handkerchief should be clean. There is only one other article as repulsive as a dirty handkerchief and that's a dirty powder puff.

Jewelry. Jewelry may be an accessory. It may be a symbol of wealth. It may have a sentimental value — an engagement or wedding ring. It may represent membership in something worth while — your class in high school. But no matter what it is, it ought to have a meaning. When it becomes nothing more than one more thing hung or pinned on you, then it is in bad taste even though its cost runs into thousands of dollars.

There are faces that can stand ear rings, shiny necklaces, clips in the hair. But the girl who wears glasses needs to consider long before she chooses these pieces of glittering jewelry. Glasses are one object already "hung on her face." Should she hang more of them or should she, by other glitter, call attention to the glasses? Common sense says, "No."

Jingly bracelets, clanking chains, tinkling beads are altogether

too reminiscent of the bell on the cow to please a person who is fastidious about her clothes and costumes.

Umbrellas. Shall we consider an umbrella an accessory or a necessity? When the "stick", as the English call it, is of serviceable black with utilitarian handle, it is a necessity and nothing else, but the short stubby umbrella with its gay silk cover and its pudgy handle may lend a decorative note to a rainy-day costume. Yes, umbrellas may be ornamental accessories.

Hats. Hats are sometimes called an accessory. Most of us consider them a necessity. Many people wonder what milliners do to the mirrors in their shops to make a hat look well on us there and look like — well, like a sad mistake after we get away from the shop. It has been suggested that the hat we do finally choose looks well on us because we have tried on so many that look worse that — by comparison — the one chosen is fine. It may be that trying on many hats softens and loosens the hair and makes it a better frame for that hat than when it is put on a freshly combed head.

We may have neglected to observe the exact angle that the milliner used when she adjusted the hat and made it becoming. Put on at another angle the hat loses its becoming line. Or we may have looked at it only from the seated position and without a coat. Any hat should be tried with the coat as well as without. It should be worn while you walk around the shop and catch unexpected views of yourself, full length, in the mirror.

A hat is but a part of a complete picture and should be considered as such.

It is a mistake to go in to buy a hat just because you like the looks of it in the shop window.

The girl with the long face and drooping shoulders can stand a fairly broad-brimmed hat if the brim dips slightly at the front and back. The girl who wears glasses ought to have a hat with a brim wide enough to shade the lenses, so they don't throw strange shadows on the face.

The small pert girl who can wear the snug bodice and full skirt can wear the hat with the upturned brim. The girl with the demure smile and downcast eyes wears the turned-down-brim hat better.

The hat which shows knobs of hair underneath it is fitted too tightly or the hair is too heavy and needs thinning or flattening. The hat which has a down-in-the-back-brim tends to give you a discouraged air.

Look at a hat from both sides, all angles, front and back. Try it more than once.

If you are pale, avoid the indefinite colors like taupe and gray or tan.

Often a little bright color near the face or on the hat away from the face will make the hat more becoming. With a dark coat a small vivid hat may be best.

A dress of black and red plaid may take a black hat or a red one, but not a black and red one with colors combined in equal proportions. Colors in equal proportions are bad artistry. It looks as if you said, "Let me see, my dress has so much black and so much red. I'll distribute the colors the same way in the hat." Let your hat be an individual not a copy-cat.

A hat cannot be purchased in a moment. But don't go in to try on hats when you have no intention of buying. That may be an indoor sport for you but it is nothing but a waste of time and energy for the saleswoman. If, however, you can't find the hat you want, don't let the woman persuade you to take one that is n't right.

Beware of the salesperson who says, when you demur about the line of the hat, "But it's the latest thing. It has the new line and you have to get used to it. Any new hat looks strange at first." This is usually said in a tone that seems to pity your ignorance so you hastily assent and say, "Yes, I know," and then you buy the hat. That's too bad, for unless the line of a hat is becoming when first tried on, it will never be. Becomingness is not a matter of habit and accustomed view. Listen to what Pope says:

> Vice is a monster of so frightful mien
> As to be hated, needs but to be seen.
> Yet seen too oft, familiar with her face
> We first endure, then pity, then embrace.[1]

Familiarity may endear vice. Are bad fashions nothing but vices? If so, we can get used to them.

[1] "Essay on Man," Alexander Pope. The Macmillan Company.

CLASS ACTIVITIES

1. After a study of color and line as it applies to clothing, analyze yourself to find out what colors and lines are best suited to you.

2. You might group the class into types such as (1) blonds and brunettes, according to personal coloring; (2) tall, short, average builds with description of face, shoulders, and hips; (3) personality traits: shy, retiring, active, dreamy, forceful, etc.

3. Using crêpe paper or samples of fabrics, try out various colors on girls in the class. Decide on colors each girl can wear best. Each girl should keep a record of the colors that are most becoming to her.

4. Each girl may choose from magazines or books lines and designs in garments suitable for her build and personality traits. Have the other members of the class criticize your choice.

PROBLEMS IN DESIGN

A. If you were choosing clothing for Margery, who is inclined to be stout, what features below would you consider becoming to her?

1. Broken lines, such as different colors in skirt and waist
2. Long vertical lines continued from head to toe
3. Light or bright hose with dark shoes
4. One-color fabrics, dull in finish, soft subdued colors
5. Broad tucks and stripes
6. Round necklines and large round beads
7. Same color in accessories, especially in hat and hose, as in costume
8. High-heeled shoes

B. Mary is quite thin and tall. Choose which of the following she would find most becoming:

1. Perpendicular lines, sleeveless dresses
2. Curves, scallops
3. Pointed necklines
4. Lustrous materials and stiff fabrics
5. Sashes
6. Long, narrow skirts
7. Ruffles and fluffiness

Write your answers on a sheet of paper and hand in.

Choosing Suitable Fabrics for Your Clothing

After all this discussion regarding clothes it might be timely to pause and ask ourselves why we wear clothes anyway.

Custom, modesty, protection, comfort cover the ground quite thoroughly. We might argue that modesty and custom are interchangeable, but there are clothes that are far from being modest, so perhaps the two words are not synonymous now although they were in the beginning. We might add that we wear clothes to impress our friends and enemies. A popular subject for debate is this — do girls wear clothes to impress other girls or to impress boys? Strangely enough the right answer is: to impress other girls.

When we wear clothes for protection, we want to be protected from wind, rain, sleet, snow, cold, extreme cold, or extreme warmth.

Certain materials will offer more protection than others. For instance, fur, because of its impervious skin backing, offers great protection from cold and moisture.

Rubber will protect from outer moisture, but its imperviousness holds in the perspiration.

Wool offers protection from cold, especially. The source of wool is animal, just as is fur. We have wool from sheep, from goats, camels, and occasionally other hairy creatures.

Cotton is a plant fiber. It grows on fairly low plants which flourish in warm climates. The cotton boll is a mass of seemingly tangled fibers with cotton seeds enmeshed within. At one time these had to be taken out by hand; now the cotton gin does the ginning quickly and almost miraculously.

A few other plant fibers are used — exotic ramie, for example. These make textiles of a peculiar translucent appearance.

The most prized plant fiber is that which comes from flax. Linen, the textile we make from it, has been prized since ancient days.

Silk is of animal origin. An industrious little worm spins himself a warm cocoon. Man unspins the cocoon and spins himself and his lady fair a delightful material called silk.

None of these fibers are man made. Man may take them and untangle them, shred them, clean them, card, spin, and weave

them from materials nature provides, but there is small basic change in the material itself.

Remember the story of Cinderella and her fairy godmother who waved her magic wand to give the overworked Cinderella a coach and four, a beautiful ball gown, glittering glass slippers that fitted the little slavey's slender feet? Even if a prince had never appeared at the ball or in the kitchen of Cinderella's work-a-day world, the story of her transformation would still hold us enthralled.

From rags and tatters to silks and velvets and sparkling glass slippers just by the waving of a wand!

Oddly enough similar magic has been worked in the first half of the twentieth century and not by a fairy godmother either. Wood pulp and cotton linters have been transformed into supple, silky velvets and chiffons. Casein in milk has been changed to a cloth that looks and feels like wool. Molten sand becomes glass fiber which is woven into flexible glass cloth. Coal and air and water appear as Nylon — a fiber more resilient than silk itself. These wonders and many others have been performed by scientists working in chemical and textile laboratories. They have made the prosaic story of textiles over into something thrilling and wonderful.

So many changes have been made, so many new products are now available that it is necessary to learn a new vocabulary and to acquire new funds of information. Even the time-honored phrase "all wool and a yard wide" may not mean what it used to.

Not only are there new fabrics on the market but the old familiar ones have been treated so that they no longer shrink, or fade, or split, or wrinkle. Textile fibers can be protected against water, soil, and moths. It is doubtful whether Cinderella's godmother could equal the magic of the textile scientists of today.

Rayon. The story of rayons is the first one to be told. The details of it will be learned in your chemistry laboratory, because the making of rayon is essentially a chemical process. It transforms chips of wood or discarded cotton linters into a sticky liquid which is forced through appertures so tiny that it comes out as a thin thread. This thread is later woven into cloth.

Rayon, a man-made fiber, first saw the light of day back in a town in France where an epidemic among the silkworms spread terror in 1878. Silk manufacturers of France needed silk and

needed it badly. And the valuable silkworms were dying. A student of Pasteur, Count Chardonnet, was assigned the task of finding out how the worm transformed mulberry leaf into silken fiber. Chardonnet duplicated the process to a certain extent. He succeeded in making a filament with some of the characteristics of silk, but it remained essentially cellulose—its original substance.

The name given to the new fiber proved the initial stumbling block in its later acceptance. The name given was "artificial silk." "Visca" was the name given to embroidery "silk." Visca fibers were extremely shiny, stiff, lacking any of the soft draping qualities of the product made by the silkworm. But at last the silkworm had a competitor!

England, Germany, France set chemists to work. And their results were quite alike although the processes used to obtain them were different. Many methods have been tried and discarded.

At present the rayon fiber is made by any one of three processes:

The first is the Viscose process. Raw materials used are spruce chips or cotton linters. (These are the fibers which cling to the seeds of the cotton boll after the seeds have been separated from the cotton.)

The resulting rayon fiber is of varying weights. It may be spun into any desired length. Frequently it is chopped into short lengths and woven in with an acetate rayon or with fibers of silk or wool or cotton. The resulting textile is called "spun rayon", which has proved popular for spectator sports clothes. Viscose rayon lends itself nicely to crêping. It cleans satisfactorily but needs care in laundering as the fiber weakens when wet. It must not be ironed with too hot an iron.

The second rayon is made by the acetate process. Cotton linters are used. The resulting fiber makes taffetas which will not split, moirés which hold their pattern forever. Acetate rayons must not be ironed at anything other than a moderate heat. Cleaning liquids containing such solvents as chloroform, acetone, and ether must be avoided. An acetate rayon needs special attention, and unless the material is labeled so that you know what you are buying you may experience difficulties in cleaning and laundering the articles made from it.

The third rayon fiber is made by what is called the cuprammonium process. Cotton linters are used. The resulting fiber is extremely slender and strong. Sheer crêpes are very satisfactorily made from this fiber. "Bemberg" is the best known name of a textile made by the cuprammonium process. Bemberg stands an iron as hot as that used for cotton. The fiber does not weaken to any extent by moisture. It is perspiration-proof and -repellent.

These manufacturing and fiber-reaction facts do not tell any of the glamorous things about rayon. The manufacturing processes have been improved so that today's material may be dull-surfaced or soft-lustered or glinting with highlights. It may be as cobwebby as the sheerest of chiffons or as sturdy as corduroy. It may be stiff enough to make a gown that stands alone in all its grandeur of brocade and metallic threads or it may be so soft and supple it can be drawn through a wedding ring. Even great-great-grandmother's silks from China and France could do no more.

Perhaps rayon's durability is one of its greatest assets. Another asset is its ability to take dyes and hold them well. White rayons stay white and do not yellow with age, cleaning, or wear. Rayon fibers are hard and smooth and shed dirt readily. Their weights may be varied at the maker's will. The rayon fiber has lost its original harshness and achieved drapability. Threads in the early types of woven rayon fabrics used to slip and slide about especially at seams, where the sewing thread made a division and where pull and tension came. But that difficulty has been overcome. Good rayons no longer are afflicted with slippage.

The generic name "rayon" has been assigned legally to all of these fibers. Trade names must be followed by the family name "rayon." They must be listed as "celanese" rayon, "Crown" rayon, "bemberg" rayon, for example. A textile containing as little as one thread of rayon must be so marked; if the rest of the textile is cotton then the material must be called a "cotton-rayon." If, however, the weight of the rayon in the textile is greater than the weight of the cotton the label must read "rayon-cotton."

These man-made fibers have thrown off their handicap at last and are no longer called "artificial silk." They stand on their own feet as rayons and sturdy feet they are, too.

There are unsatisfactory rayons which are dear at any price. But, by and large, the cost of rayon is low when compared to that of silks, velvets, chiffons, or supple woolens.

Now for some other new textiles.

Nylon. Nylon is the wonder child in the textile world at present. It is made from coal, air, and water. The filaments are more resilient than silk so that at last a rival for a silk stocking has appeared.

Aralac. Italian textile chemists produced a protein fiber which they called "lanital." A similar fiber is known in the United States as "aralac." Casein — the protein of milk — is transformed into a fiber which looks and feels like wool. Its original handicap of weak tensile strength has been partly overcome; its strength is fortified, too, by weaving it with other and stronger fibers. Think how exciting it is to wear milk as well as to drink it and eat it.

Glass fiber. Textiles made from glass fiber were on exhibit at the New York World's Fair. These textiles possess flexibility. They are as beautiful in color as might be expected when one recalls the depth and translucence of world-famous stained glass windows. Think how easy it is going to be to wash a glass dress, think of the remote possibility of a sudden summer shower spotting glass fiber curtains. The water would run off them much as it runs off a duck's back. At present the fabric is rather expensive. It is used for draperies more than for dresses, but Cinderella may wear a glass frock as well as glass slippers, and not in the too far distant future, either.

Perhaps we may have to revise the saying "Folks who live in glass houses should never throw stones" to "Girls who wear glass dresses must never show bones."

Cellophane. Cellophane supplanted glazed tarlatan or Argentine cloth. In the beginning the cellophane was woven into lacy fabrics which took their shining places at windows. Their stiffness prevented easy draping. Cellophane cleaned easily, washed satisfactorily, dyed permanently if the water was kept at less than lukewarm temperature. It was discovered that cellophane shrank and stretched as humidity decreased or increased. Curtains crept up or lay flat on the floor according to the weather. The upshot of the early experimental work with cellophane was the weaving of

a cellophane fiber in with a more durable one, such as cotton or silk. The results have proven both popular and successful.

So much for new fabrics and textiles. Now we come to the more familiar ones which have been treated in new ways.

Pliofilm and **Koroseal** are trade names for textiles which have been thoroughly coated or impregnated with a waterproof coating. Koroseal may be sewed with an iron instead of with needle and thread. Two pieces to be seamed are laid on top of one another. Over them goes a protecting piece of cloth. A moderately hot iron is applied and when lifted and the cloth is taken away, the two Koroseal-treated pieces are joined tightly and more completely than sewing thread and needle could ever accomplish. Think of ironing yourself a dress or ironing a hem in a dress. The possibilities for development of this coating treatment are innumerable.

When we mentioned rubber we should have spoken of one of the newest materials in the textile field — lastex. It is a two-way-stretch material that clings to the body it covers. Apparently its life is long and its laundering qualities excellent.

Following are terms and definitions for recent developments in textile finishes:

Sanforizing, Duralizing, Texturity. Denote controlled shrinkage. Prevent fabrics from shrinking more than one per cent; allow a tolerance of two per cent. Used in cotton, mixtures of wool and cotton, linen, spun rayon, percales, all wool or worsted. Last through the life of the garment.

Vitalizing, Tebilizing (also called **Martinizing** or **Sheltinizing** on some brands of velvet), **Tootalizing.** Make fabrics crease- or crush-resistant. Used in dress fabrics, as linen, voiles, and other cottons, rayons, velvets. Durable.

Color tested. Fast color. Insures colors fast to sun, washing, perspiration, crocking, dry cleaning, and steam pressing. Used in men's and women's wear and home furnishings — cottons, linens, and rayon. Durable.

Naphthalated. Cleaned and texture preserved. Used on wool. Permanent.

Bellmanizing. Preserves original crisp finish. Used on dress fabrics and curtains — muslin, linen, lawn, voile, organdy. Durable.

Air-parel. Air conditioned. Removes lint; makes fabric cooler. Used on cottons — chambray, percale. Durable.

Ban-dri, Cravenette, Zelan. Make fabrics water repellent and spot and stain resistant. Used on men's and women's outer wearing apparel — raincoats, sportswear, etc. Durable. Cravenette comes out in dry cleaning but can be renewed.

Crown tested. Rayon fabrics check tested and approved for fabric durability, seam slippage, dry cleaning, washability.

We have been discussing new finishes for old and new materials. However, the weavers and converters have long used many accepted finishes. For instance, cotton may be mercerized, or soaked in strong caustic, and then washed in pure water to remove the caustic.

Lisle finish is made by treating the long-stapled Egyptian cotton to gas flames which burn off any projecting fiber ends or fuzz. The result is a smooth, glossy thread. Treating cotton in a weak acid solution gives a simulated lisle finish.

Cotton textiles are bleached. Cloth may be treated with a sizing such as starch, glue-fat, casein, gelatin, gluten, minerals, and antiseptic substances. By passing these under heated heavy-patterned rolls we get calendered material. Moiré is one.

Wools may be weighted with short hairs or fibers called flocks. The wool is pulled or put into machines that apply heat, pressure, and moisture. As a result the materials mat or felt and become closer in texture. Many wools are napped or teaseled to raise the surface.

Some silks are weighted or impregnated with tannin which has a special affinity for salts of iron or tin. Some are lead weighted.

"Pure dye silk" is a term which may be used only when a white silk textile contains no more than ten per cent weighting, or fifteen per cent weighting if the silk is black.

It is necessary that you know what unadulterated or untreated material is on the market. This is where the American Home Economics Association, in its fight for buying standards, is of help. The Association needs your support and you need its knowledge. Discuss the possibilities of getting some information from the Bureau of Standards as well. Read the various magazines to see what ones are fighting for standards in buying for the consumer.

Now we pause for a moment to study the weaves that have been developed to change fibers into cloth.

Plain Weave. The first and simplest weave is called "plain." It has the yarns or threads interlaced alternately in each row of weaving. A good example is cheesecloth. This weave is varied by having the woof, or filling threads, arranged in pairs and the warp threads arranged singly. This gives a weave such as is found in some shirting — usually called Oxford. When the warp and woof threads are both arranged in pairs, we get a basket weave. This is used in monk's cloth, which has been described as a "burlap with a college education", or a burlap that "has had a chance." It is effective and is employed primarily with rather coarse threads of cotton or wool.

Among the plain weaves we have calico, cheesecloth, percale, muslin, gingham, cambric, challis, chiffon, sheeting, long cloth, cotton voile, lawn, organdy, broadcloth, flannel, taffeta, foulard. Using this weave but varying the size of the yarn, we get Bedford cord, poplin, piqué, grosgrain, faille.

Twill Weave. The second weave is a twill weave. The yarns are interlaced alternately but in a diagonal progression from row to row rather than directly under one another. Twills are found in men's suitings, for instance.

In the twills we have ticking, canton flannel, serge, cashmere, silk serge. The diagonal line may be made more complicated so that a herringbone pattern results.

Satin Weave. The third weave is the satin one. It has floating threads on its surface caught down at intervals. Being woven less securely as to surface, the material is apt to rough up.

The satin weaves include satin, sateen, and all sorts of satin variations, crêpe meteor, messaline, satin crêpe.

Pile Weave. Quite opposed to the satin-smooth weave, we have the pile weaves such as chenille, velvet, plush. The loops which made the nap have been sheared or cut off evenly along the top. When the loops are not cut, we have terry cloth or bath toweling.

Gauze Weave. There are gauze weaves made on special looms where the mesh is lacy, resembling fancy netting.

Double Cloth Weave. We have the opposite of this fairy-like weave in the double cloth weave. Here two cloths are woven at

one time using an interlacing process for the warp and filling. Heavy silks, some cloakings, and overcoatings are made in this way. The same weave, omitting the interlacing, makes the tubular pillow casing, pockets, and seamless grain bags.

Lappet Weave. Dotted swiss and like materials, where an imitation of embroidery is woven into the cloth, is made with what is called lappet weaving.

Figured Weave. Then there are the figured weaves made on Jacquard looms. Silk damasks, brocades, fancy vesting materials are made on this loom.

Then turn to another side of the subject — one which takes you far afield into romance and history. Take the names Madras, calico, silesia, corduroy, angel skin. Where did they come from? How did the material get its name and why?

The way in which a material is woven, the way in which the surface is treated will affect the wearing quality of the cloth.

The yarns used have much to do with a material growing shiny or staying dull. Serge woven from a hard-twisted worsted yarn shows shine quickly. Tweed woven from a soft wool yarn never acquires that shiny gloss.

In buying a dress that is to be worn for a long time the ability of the fabric to resist shine is something to consider.

A material with a deep pile or nap, such as velvet, mats down under pressure. That makes it a poor material for daily wear.

If we can find a way to raise the surface again, or if we can remove the shine from material, we need have less hesitation regarding its purchase.

If you hang velvet in a bathroom filled with steam from a full tub of hot water, the nap is raised somewhat on the dress that receives the steam bath. But if you hang a silk crêpe dress in that steam-filled room, you might as well plan to pass the dress on to a smaller sister, for it will shrink.

If you place a dry cloth over a shiny place on wool and then put a damp, not wet, cloth on top of that and press it with a fairly warm iron, the shine is somewhat removed.

Be sure that you do pressing in good daylight or under a daylight lamp. Many a scorch has been made under artificial light and seen, alas too plainly, in the cold pitiless light of day.

Shopping for Clothes

Clothing the American girl has gone through four stages in the past two hundred years.

First, everything she wore was made at home. Stockings were knitted from wool taken from the sheep's back. Her dresses were linsey-woolsey made from wool and linen, both home grown.

Second, the stage in which *nearly* everything she wore was made at home. Flannel underwear, cotton vests, panty waists, stockings, were purchased ready made, but slips, chemises, petticoats, dresses, aprons and pinafores, coats and jackets, were still of home manufacture. "Shapes" of straw, felt or velvet were purchased and trimmed by mother or the village milliner with ribbon, bands and streamers, or wreaths of field flowers. Those clothes were made to last. The workmanship and the sturdiness of the material took precedence over fashion or becomingness. A dress which was going to wear like iron had to be sewed that way or constant repair became an irritating necessity. It was as necessary to be a good seamstress as it was to know the quality of goods.

The third stage is quite recent. The advent of the power sewing machine and the development of the garment trade were partially responsible. Helping the growth of the garment industry was a new freedom of women due to the increase of labor-saving and housekeeping devices, moving of families away from the home, larger money income.

Making clothes bade fair to become a lost art. Ready-made dresses were so inexpensive that women defended their purchase, "Why, I could not begin to buy the material alone for that price! Then there is all of the work of making, too. A person is silly to try to make clothes at home. They always have that 'homemade' look. See how much style this dress has? I don't see how they can do it at that price, but that's their lookout and not mine."

True, the price was cheap but the dress was apt to prove unsatisfactory. Seams were so scant that the dress could not be let out. It shrank in laundering, too. Colors ran. Queer things happened to trimming when water touched it or when it went to the cleaner. The skirt hung unevenly. The sleeves were not set in alike. The thread in the seams broke. All things consid-

ered, the dress was not really cheap — not if the number of wearings was paired with the cost.

Not all the ready-made clothes acted so badly, of course. But a cheap dress never gave real satisfaction. The manufacturer of the goods, the girls who worked on the power machines, the jobbers who sold the dresses, the stores which bought them, must have received very little for their work. Think of the hands through which a dress must pass from its original shape of textile fiber to a completed garment hanging in your clothes closet. Perhaps the small margin of profit explains why seams were skimpy, why thread broke, why trimmings were askew and unsatisfactory.

And then came the fourth stage. Women found they had more leisure and less money. The United States — the whole world — was in the grip of a depression. Women decided to make some of their dresses and underwear. Certain clothes they continued to buy. But their standards of judgment or their demands began to rise because now they felt that they had to get their money's worth. They had been getting value received for what they had been spending in certain cases, but the money spent was so small that the value had to be correspondingly minute.

Let's accompany you and your mother when you go to buy a coat. You are the one who is more apt to make the demand that the coat must have style. You say it must not be a coat which will be duplicated by every second person you see on the street. Your mother says she wants the coat to wear, so she looks at the fabric. She is more interested in the becomingness, possibly, than in the style, although there are times when the two are synonymous. She is as apt to err in demanding a youthful style for you as you are in asking for a sophisticated one. The wise saleswoman helps you to compromise.

You are more interested in the front view you see reflected in the mirror than you are in the way the coat fits in the back and the evenness of the skirt. Your mother notices those things. She checks the material and asks what it is. She is the one who turns the coat inside out. She looks for seam allowances. She asks about the inner lining. You recall your class discussions and you look to see whether the lining bears a descriptive label. You know that the coat will hang better if the lining and the coat skirt

are hemmed separately, so you look for that. But it is the salesperson who calls your attention to the wide overlap so that your knees are covered when you sit down. She shows you the way in which the collar can turn up to frame the face.

Finally, between the three of you, you have purchased a coat of good but not extreme style or pattern, a coat which is well made of durable materials with part of its cost put into well-made buttonholes or fastenings and good tailoring. Such a coat will be a pleasure to wear as long as you have it in your wardrobe.

When you go to buy ready-made clothes look for these things: an identifying label telling you of what material the garment is made. If there is no label, get a statement from the salesperson. See that the sales check records this information and does not say merely, "One dress, price. . . ." Check the width of the seams and their straightness. Look at the hem finish. Study the garment long enough so that you know whether parts of it have been niggardly or crookedly cut. See whether the neckline is symmetrically cut and carefully finished. In addition to that select a garment which can be successfully altered if alterations are required and which, when finished, will be becoming to you.

Dresses and coats can be purchased more cheaply at the end of a season than at the start. And seasons these days run counterclockwise with the calendar!

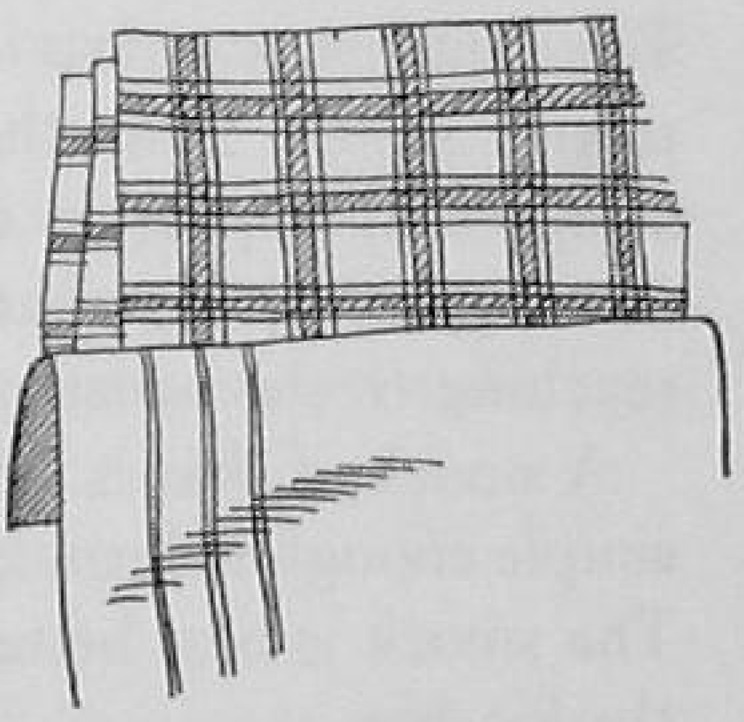
Sometimes it pays to purchase a dress in a specialty or smart shop even though the price is high. Such a dress may be just enough ahead of the styles shown and worn at the time to keep it in style for two or three years after its purchase. At a shop of this kind the dresses usually have generous seam allowances and finishes that do not flatten or obscure the style. The salespeople in these specialty shops are less likely to be well informed about textiles. Their customers select clothes for color and line and effect, and are not so concerned with the material.

With a limited amount of money to spend it is better to select a garment with little trimming rather than one that has everything on its surface so it looks like a Christmas tree.

Bargains in clothes are not easy to find. Remember a bargain in clothes is just like any other bargain — worth getting only when the purchase meets a need satisfactorily and economically.

UNIT 2. THE LABORATORY OUTFIT

Does your home economics library have a textbook published fifteen or twenty years ago? If so, look at the illustrations of the girls at work. See them wearing aprons that are gathered in at the waist with bibs held in place by shoulder straps. See the protective sleeves they wear. Look at the mob cap, held in place by the elastic band run through the casing. Now peek into the foods laboratory in your school. What do you see the girls wearing? Smocks and a head band to hold the hair in place. Or the girls may be wearing coverall aprons of the butcher type. In both the picture of the past and of the present you notice the hand and dish towels and the pot holders.



Evidently, though the fashion may change, the laboratory outfit should consist of some type of dress covering, some device to hold the hair out of the eyes of the worker, pot holders, and towels.

How many of those articles do you need to make and how many can you make? The towels may be school property. If you are asked to furnish your own, you choose linen rather than cotton because it is less linty. A loosely woven crash is more absorbent than a closely woven one. You mark the towel with your initials. The hems are simple things not more than one quarter of an inch wide. The selvage edges are left untouched.

You want a towel that is distinctive. You may choose one with a red border, or bands of red and blue, or green, or green and red.

Select a pot holder which is thick enough to protect the hand from the hot saucepan handles. It needs to be large enough to protect the entire palm and fingers. It must be flexible enough so that the hand can get a good grasp of the hot handle and not have it slip at an inopportune time.

The pot holders should not have corners, nor fancy edges that stick into hot liquids or juicy pie syrups, like rhubarb. Many a bad burn has come from such a holder.

The pot holder should be easily washable. It may have a removable cover of material to match the smock or apron. In-

side this cover there should be an inner lining of quilted padding, or stitched old washcloths, or other heavy material.

The pot holder should be gay so that it may be seen easily when it has been laid down carelessly on the top of the range or the table. A bright pot holder may be made of large red-and-white-checked gingham, with the interlining of cotton held in place by quilting up and down the lines of the checks. This may be bound with bias tape. An appliqué of a small red apple, with green stem and leaf, will make this holder perky enough to appear at a breakfast table with the coffee pot.

The head band is usually made after your instructor's pet pattern. The desirable covering is cool, adjustable, easily laundered.

Now for the dress protector. For this you will need a pattern. The simplest covering is the butcher's-type apron. The objections to this are the strap that binds the back of the neck, the shoulder straps that persist in slipping down onto the arms. If you can develop an apron that crosses the straps in back or has a back reaching to the waist, you have a desirable covering.

A smock, if that is what you choose, should be easy to slip on and simple enough to launder easily. The sleeves may be long or short. The smock is best belted, otherwise it billows as you hurry around the kitchen.

Since you will wear this garment for at least two years, you need to make ample seams and deep hems. Girls have a habit of growing both upwards and outwards. Your outfit should be selected with that in mind.

The laboratory will be warm because of the many stoves. Therefore, you do not want too stout a material. If you have anything as firm as denim, you will be uncomfortably warm.

You will get many a spot on this coverall. Therefore, you need to choose material that will launder easily and that will not be ruined by spots and spot removers.

If you choose the smock, remember that you are going to give foods all sorts of vigorous punishment — beating, whipping, stirring. Allow room in the smock for plenty of swing. Have large armholes. If you plan to wear the smock with no dress underneath it, be sure to finish the armhole seams with flat fell.

Select garments with buttons fairly close together. Be sure they

are sewed on firmly. Vigorous action brings strain on one's garments. Be sure the buttons don't pop off at crucial moments.

If you have sleeves that reach to the wrist, fasten them with a narrow cuff so the sleeve may be unbuttoned and rolled up when you mix a whole wash-boiler full of Christmas fruit cake.

Now that we have listed the desirable features, we select a pattern. We check to see how much material is required. We check requirements when using material with an up-and-down pattern, with a wrong and a right side. We find out the width of the material. These three factors influence the amount of material required. So, naturally, does our own size.

The next step after purchasing the pattern and the material is the opening of the pattern and the identifying of the various parts. It is wise to pin the paper pattern together and to slip it on to get an idea of changes that need to be made.

We study the directions on the pattern, which tell us how to make alterations, how to widen or narrow shoulders, lengthen or shorten waist. We make the necessary changes, and pin the pattern together again.

We press the material and then lay the pattern on. We follow the cutting chart as given with the pattern.

We make the identifying marks and cut the material, using a sharply pointed shears that does not chew the goods.

We baste, try on, fit, change basting where needed, try again. We stitch the seams, press, and try on. We follow the directions through to the end and we find that we end as we started, pressing the material. Only, the last pressing gives us a garment ready to wear and to enjoy.

UNIT 3. CLOTHING NEEDS AND BUDGETS

This is a list of clothing for a high school girl, as worked out by a sophomore high school class in home economics. They decided that this list included the garments which would be almost essential in the wardrobe of a high school girl from September to May of the school year. Do you agree with them? What changes would you make in the list?

1 blouse	1 sweater	1 winter church dress
1 skirt	1 winter school dress	1 good dress for spring

2 cotton school dresses for fall and spring
2 smocks
2 slips
3 pairs bloomers } or three one-piece combination suits
3 brassières }
2 vests
4 pairs hose
2 pairs shoes
12 handkerchiefs
2 coats, one for winter and one for fall and spring or one medium-weight coat with sweater to wear under it for cold weather
2 hats (one winter, one spring)
4 pairs of pajamas

Clothing Needs. You may want to change the bloomers to panties or shorts. You may choose nightgowns in place of pajamas.

At the time this book is written the twin-sweater outfits are in vogue. That set might take the place of the blouse and sweater. There is no mention of summer clothes for the vacation period. Low-back tennis dresses, which make admirable sunning and gardening clothes, a summer wrap that does little save add allure, and a wide, floppy, garden-party hat might be added. The knitted and crocheted berets, purses, bags, gloves, belts, and scarfs are accessories that are added easily if you know how to make them yourself. There is no listing of expenses for deodorants, lost-handkerchief replacement, resoling of shoes, occasional shampoos. Can you count on birthday money for those or should they be made a definite part of your clothing and good-looks budget?

We spoke a moment ago of the accessories that you could make if you were handy with knitting needles or crochet hook.

What articles in the list can you make with needle, thread, and the skills you are acquiring in your clothing classes at school?

Brassières, panties, shorts, bloomers, pajamas or nightgowns, slips, kimono, school dresses of cotton, dressier outfits of silk, even tailored dresses, slacks, playsuits, shorts, and blouses are not going to prove too difficult.

With all that ahead of us, don't you think we had better start our sewing at once?

The laboratory outfit which we have already made really doesn't

count, although you learned a great many foundation facts in the making of the outfit.

But we get even closer to the foundation now, for we start with underwear.

INDIVIDUAL ASSIGNMENTS

Make an inventory of the clothing you have on hand, using a table similar to the one given below for recording your inventory.

GARMENTS	NO.	APPROXIMATE REPLACEMENT VALUE	LIST NEEDED GARMENTS, DESCRIPTION, AND APPROXIMATE COST
I. Outer clothing			
Suits			
Coats			
a. Winter			
b. Spring			
Dresses			
a. Afternoon			
b. Church			
c. School			
d. Party			
e. House (or smocks)			
Hats			
Winter			
Summer			
Shoes			
Dress			
School			
Gloves			
II. Underclothing			
Underwear			
a. Bloomers			
b. Brassières			
c. Step-ins			
d. Combination garments			
Slips			
Nightgowns or pajamas			
Kimonos			
Hosiery			
Dress			
School			
III. Accessories			
Neckwear			
Belts			
Purses			
Handkerchiefs			

Keep account of the money that you spend or that is spent for you for your clothing for one year. At the conclusion of the year make a spending plan for the following year. Decide whether the amount of money spent for you is your fair share of the family clothing expenditure.

Plan a clothing budget for a sophomore girl who attends a centralized school. Budget for one year is $50.00. (The cost of some garments may be divided over a three-year-service period.)

Study the styles of three years ago. Decide which of these would be suitable now. Determine the characteristics that help you in selecting a garment to be worn for three years.

WARDROBE PROBLEMS

When you have completed your own wardrobe plans, test your ability to plan by solving these problems:

Ruth, in looking over her winter wardrobe, finds that she needs a school dress and a slip to wear with it. She is very fair, has blue eyes, and is of medium height. She has a brown winter coat and brown oxfords for school. The family finances are quite limited. She may do one of several things. Select the best for her:

1. Buy a green and brown slip-over sweater and a brown skirt, matching as nearly as possible her coat. Wear this without a slip.

2. Buy a silk blouse, buy brown wool material and make herself a skirt. Buy material and make a rayon slip.

3. Buy a green and brown novelty travel crêpe dress at $5.95. Buy a tan celanese slip at $1.95.

4. Buy and make a light-weight wool dress in a golden brown ($1.00 a yard) using tan silk for trimming. Make a slip of one of her partially worn-out summer silk dresses.

Mary needs a dress for church this winter. Her good coat is dark green trimmed with muskrat. She has a dark green hat which she thinks she can wear if it is slightly remodeled. She will also need shoes and stockings. She has brown hair and eyes but a fair, rosy skin. Her mother tells her she may spend twenty dollars for the things she needs. Select her best procedure:

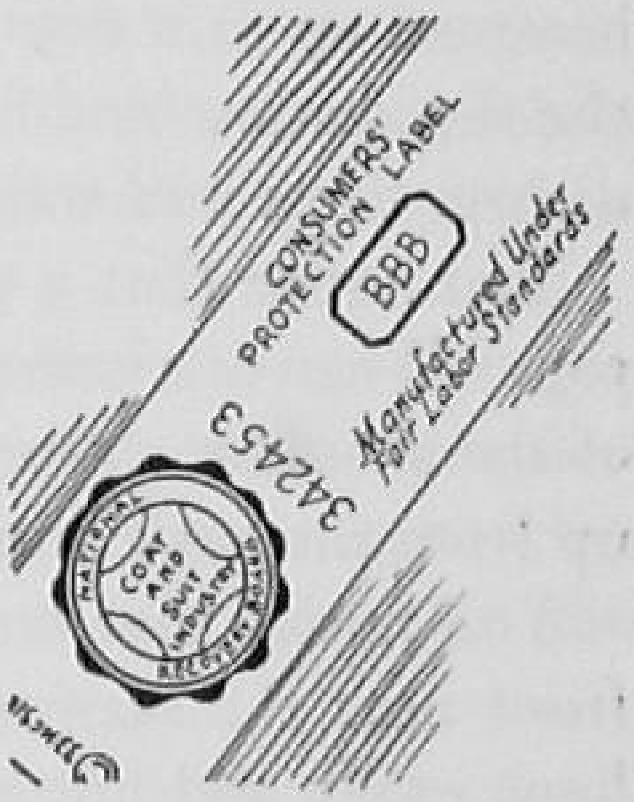
1. Buy a green silk dress at $6.95, a pair of green shoes for ten dollars, and three pairs of hose (service weight) at $1.00 a pair.

2. Buy five yards of green and brown novelty wool, at $1.00 a yard, making a dress for herself — the pattern, thread, and trimming costing $1.50. Buy a pair of brown shoes at $8.50, three pairs of service-weight hose (brown) at $1.00 a pair, a brown purse at $1.95.

3. Buy a maroon silk crêpe dress ready-made at $8.50, a maroon felt hat at $2.00, a pair of black shoes at $5.00, three pairs of chiffon hose at $1.65.

UNIT 4. UNDERWEAR

Why do you suppose so many people buy ready-made underwear? Is it because they don't know how to sew? Because the home-made garments are more expensive? Because the home-made ones have n't any style?



When you have finished this course, you won't have the excuse of not knowing how to sew. So that argument is out.

Can you hope to compete in price? The cheap ready-made garments are only too often made of sleazy material that pulls out at the seams. The material is cut scant. It fades and sags and shrinks. None of us wants to compete with the quality, which is one factor in the low price.

Quantity production is another factor. The manufacturer buys material in carload lots, bolt on bolt. He has electric shears that cut through piles of material as easily as if the material was soft butter. He uses power machines that do uncanny things like making buttonholes, sewing on buttons, as well as "zipping" up and down the seams. He pays low wages to the girls who operate the machines.

Because of these factors he can sell his goods at a low cost and still make a profit.

Some years ago the Consumers' League became concerned over low wages and indecent working quarters. They started a "white list" on which were put all meritorious firms. Customers were urged to buy only those garments which bore a label saying they were made under approved conditions. Later the garment

manufacturers agreed upon a label that told the purchaser the garment had been made under high labor standards.

The quality of the material may be poor, as pointed out previously, but the ready-made garments have to have style. That is the thing which we find hard to copy. And yet a careful study of the garments offered show us that duplication is not so hard.

All ready-made garments strive to achieve flatness. No bunchy seams, not even French seams, but flat fell ones are used; no bulky hems but fitted facings; fitted yokes for panties and bloomers instead of bands of elastic.

Many slips are re-enforced with a "shadow panel" or "shadow hem." This means that the material is cut extra long and is hemmed up to a depth of fifteen or eighteen inches. This makes the slip shadow proof and is a great comfort when you are wearing a sheer dress and walking against a strong sunlight.

You notice that a good slip omits any ribbon or tape tie at the top. When one is used, the slits for inserting the tape are near one of the shoulder straps. Copy this, and avoid the ribbons popping up from the neck line of your dress.

You notice that many slips have a horizontal dart taken in the front near the seam and under the bust. This allows the slip to hang easily and not bunch itself down the center front.

In looking at well-made commercial nightgowns, kimonos, or pajama-coat neck lines you see that there is a fitted facing and not a turned-back hem. This allows the material to lie flat and smooth. Flowing sleeves usually have facings, not hems. Bindings are used frequently to finish raw edges and to become, as well, a part of the decoration.

You notice the lapped seam used to give a tailored finish to the joining of flowing pajama legs to a fitted yoke.

Hand-made French underwear is expensive. But you can equal it in style and finish if you really want to do so.

Underwear can be made satisfactorily and economically at home if bargain sales are watched for materials, if a girl knows how to sew, and if she has time.

If you had been living in grandmother's day, you would have worn much more underwear than you do now. In fact some of you wear so little that we might ask — Why do you wear any under-

wear at all? Some girls and their mothers think underwear exists only to start perpetual arguments. But the real answer is not that one.

Underwear is worn to form a foundation for outer clothes, to protect them from the perspiration and oils of the skin. It is worn for modesty's sake and also to furnish warmth.

It is on that last point that you and Mother usually disagree. She tells you you will freeze to death and you tell her you don't want to be wrapped up like a mummy. Small chance of that, my dear, when even Mother does not insist on more than a vest, a brassière, panties, and a slip.

You won't smother or burn up with that amount, will you? There was a time when vest, corset, corset cover, long drawers, chemise, at least three petticoats, pantalettes, heavy cotton stockings were considered necessary, absolutely necessary, for any modest girl to wear.

We have dispensed with much of that superfluous cargo because we have central heating in our homes, because we are more active when out-of-doors and exposed to the weather. Open sleighs with heated bricks and straw on the floor are quite different from the closed automobile of to-day.

It does not seem possible we shall ever come back to the multitudinous underwear of bygone days, but the shops do point to the fact that warm, close-fitting, snuggly undergarments are possible for winter wear. They are mere wisps of wooly warmth, but they do keep our teeth from chattering, our noses from looking blue and pinched, and our legs from showing purple tinges through sheer stockings.

After all it is smart to be comfortable. When we are comfortable, we are good-natured. When we are good-natured, we have charm. When we have charm, people like us. Draw your own conclusions and act accordingly.

We must remember, too, that tuberculosis offers a grim and untimely ending to girls in their teens.

In every other group — men, women, boys, children — the tuberculosis death rate has fallen. But too little clothing, too late hours, too much dieting, too much going on one's nerves — all of these things help make young girls invite tuberculosis as a

visiting guest. Once a visitor, the guest settles down to stay, usually until death. Not a pretty picture, is it?

The thing that disturbs any one who admires young girls is this — girls don't look as if they were so lacking in common sense nor beauty sense. It does n't seem logical that girls can be so foolish. Little babies who don't know any better, tots of three and four that have n't cut any wisdom teeth, might be expected to do such foolish things, but girls in their teens — well, it seems incredible, that's all.

A girl came into a dress shop one hot summer day to try on a frock. When she slipped off the dress she was wearing, there was not one stitch of clothing on her body. She tried on a number of dresses. Would you like to try on dresses that had been as close to the skin of a perspiring girl as that? It does not seem decent, nor kindly, nor considerate of the other person.

So a few underclothes we shall wear. And some of them we may want to make. Brassières are not hard to make, panties or bloomers are but the work of a few hours. Slips can slip in and out of the sewing machine so quickly that they take shape almost as you look at them.

Before we go shopping let's consider what qualities we want in underwear material.

It should be washable because it will need frequent tubbing. It must absorb perspiration and body oils easily and yield them just as freely when put into lukewarm, sudsy water. Rayons do not stand careless tubbing. Silks are less durable than cottons or linens. Cottons and linens stand commercial laundering well.

A material which is a good conductor of heat, such as cotton or linen, is better than a poor conductor such as silk, rayon, wool.

The material should be comfortable next to the skin. Wool is apt to be irritating.

The material should be inconspicuous in color and design. It should be firm and yet yielding to the body shape. The present vogue for the fitted silhouette means that bunchy underwear has no place in the outfit of the well-dressed girl.

With those qualities in mind we go shopping for knitted materials such as silk jerseys or glove silks. We consider pongee, nainsook, and gingham for brassières. For shorts, panties, or bloomers

we look for cambric, broadcloth, crêpe, crêpe de Chine, gingham, nainsook, pongee, radium silk, sateen, satin.

If we want to make a slip, we omit crêpe, which is apt to be bulky, but add longcloth, pongee, and satinette to the list.

We have not said anything about other pieces of underwear we may like or need. Some girls wear teddies, a one-piece garment made with a slip top, an abbreviated skirt, and a strap which makes the skirt into something resembling panties. Some girls may want to make vests, although in the majority of cases these are purchased of soft knit wear.

For night wear there are nightgowns or pajamas. Many girls make pajamas in class, and then they make the fatal mistake of wearing them on the street or beach. No well-dressed girl walks the street or any public place with pajamas, no matter how full and flowing the trouser legs may be, no matter how gay or giddy the material of which they are made. It has been done, mercy, yes, but not by a well-dressed girl.

On the beach she may slip into them after coming from the water, although a beach wrap is warmer and more comfortable. She wears the pajamas at slumber parties and in her own room. But on the street — no.

Why not? Well, because they are too brief as to waist and too noisy as to material. As for slacks and shorts worn on the street — well, if you *must* wear them, please figure what your figure will look like.

CLASS ACTIVITIES

1. Go to the store and make a study of ready-made undergarments. Find out what fabrics are used, what kinds of trimming, what colors are available, what the prices are. Discuss with the clerk the desirable and undesirable features of garments of various costs.

2. Make a collection of samples of fabrics suitable for underwear.

3. Test your samples for shrinking and fading.

4. Look through your wardrobe to see what difference there is in white and colored garments which have been washed frequently.

5. Test some cotton fabrics for sizing.

6. Decide which undergarments can best be made at home and which might best be purchased ready-made if the income is limited and the wearer has sufficient time and ability to make some or all of the garments needed.

7. Decide which garments you will need and which you wish to make in class.

8. Make a working plan for the construction of the garment desired. Check your time schedule often to see if you are accomplishing what you planned.

9. Plan as a home project the selection or construction of other garments needed in your own wardrobe. Plan, select, and construct undergarments for another member of the family.

TEST: Your Knowledge of Fabrics Suitable for Underwear

Directions: Below are listed a number of fabrics. Make an outline similar to the one suggested. Choose from the fabrics listed those you consider suitable for underwear; place these names in the first column; list in the second column one garment for which it may be suitably used; in the third column give the name of the fiber from which this fabric is made; in the fourth column give the weave by means of which this fabric is constructed.

FABRICS SUITABLE FOR UNDERWEAR

NAME OF FABRIC	GARMENT FOR WHICH MOST SUITABLE	FIBER	WEAVE

Choose the fabrics from this list:

Pongee, serge, satin, voile, dotted swiss, tweed, percale, cretonne, broadcloth, wool crêpe, flannel, sateen, dimity, khaki, crêpe de Chine, batiste, burlap.

TEST: How Well Do You Know Your Sewing Machine?

Directions: On a sheet of paper write the numbers 1 to 14, corresponding to the uses of the parts of the machine. Write opposite

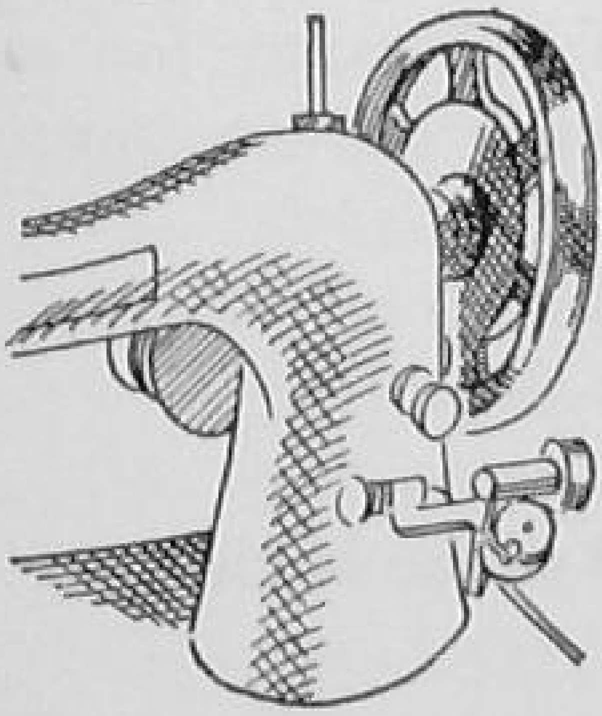
these numbers the letter which corresponds to the part of the machine which has the use indicated. Use no part more than once.

PARTS OF MACHINE

a. Balance wheel
b. Band or drive wheel
c. Bobbin
d. Bobbin ejector
e. Bobbin winder
f. Dress guard
g. Feed
h. Head
i. Lower tension
j. Needle bar
k. Presser foot
l. Stitch regulator
m. Spool spin
n. Stop-motion screw
o. Take-up
p. Thread cutter
q. Treadle
r. Upper tension

USE OF PART

1. Carries the lower thread
2. Aids in removing the bobbin
3. Holds the bobbin while being filled
4. Holds the spool of thread for the upper side of stitching
5. Holds cloth on feed
6. Carries cloth to needle and away as stitch is made
7. Releases thread for stitch and takes up excess thread
8. Used to lengthen or shorten stitch
9. Protects skirt from band wheel
10. Turns balance wheel by means of belt
11. Regulates the delivery of the bobbin thread
12. Used to cut thread after stitching is completed
13. Regulates the delivery of the needle thread
14. Throws the machine out of gear



TEST: Your Ability to Use the Sewing Machine

Directions: Make out a list like the one following. Using this list, grade yourself on your ability to use the sewing machine by marking each point by use of the following scale.

0 if not attempted
1 some progress
2 satisfactory work

Keep your list and check it at the end of each unit to note your progress. Your teacher may want to keep one for you, too. You should be able to score twenty-six by the end of the year.

1. Correctly thread the machine
2. Oil the machine when necessary
3. Judge if machine is properly adjusted
4. Know how to lengthen or shorten stitch
5. Analyze difficulties in stitching
6. Change needles when necessary
7. Keep the bulk of material to left of needle
8. Stitch close to the line of basting but not on the line
9. Test the stitch before stitching
10. Treadle without difficulty
11. Wind the bobbin
12. Draw lower thread up before starting to stitch
13. Draw threads back between toes of presser foot before cutting thread

Total

TEST: Working Habits in the Clothing Laboratory

Directions: Check yourself to find out your working habits in the clothing laboratory. Give yourself one point for each good habit. Record your score. See how much you can improve it by the end of the year.

Do I —

a. Have good sewing equipment?
1. well-fitting thimble
2. sharp scissors which cut to the end of the blade
3. good needles of right size
4. good tape line
5. plenty of sharp pins
6. a satisfactory pin cushion
7. thread suitable for basting
8. thread suitable for fabric on which I am working

b. Have a suitable box or basket in which to keep my equipment?

c. Maintain good posture while doing hand or machine sewing?

d. Have the best possible light while working?
e. Use my thimble for all hand work?
f. Tie a knot efficiently?
g. Hold my needle correctly?
h. Use a knot in my thread only when necessary?
i. Use the right-sized needle for the thread and fabric I am using?
j. Protect fabrics while I work?
1. by keeping my hands clean
2. by dusting the table and machine when necessary
3. by keeping the fabric off the floor
4. by using a protection cloth, wash dress, or apron while sewing

k. Cut with a full stroke of the shears or scissors?
l. Utilize my time to the best advantage?
1. by planning my work ahead so that I do not waste time while waiting for a sewing machine
2. by limiting my conversation to a minimum
3. by asking for help only when necessary
4. by being sure that I am right so that I will not need to do unnecessary ripping

m. Baste when necessary for most efficient work?
n. Close the sewing machine?
1. if I am the last person to use it
2. slowly so that the head is not jarred
3. without stretching the belt

o. Improve the appearance of the sewing room?
1. by putting my chair back in place
2. by picking up threads and scraps

p. Put my work away carefully so that it will not have to be pressed before I can work at it again?
q. Fasten my threads by tying or retracing?
r. Press when necessary for efficient work?
s. Put the ironing board and iron away properly?
1. if I am the last person to use it
2. so that the ironing-board cover is kept clean

t. Handle materials properly?
1. by keeping my work on a flat surface such as the table
2. so that bias edges are not stretched

u. Place pins correctly?
v. Mark notches satisfactorily?
1. so that the marking does not become too indistinct
2. so that there is sufficient material for any kind of seam (notches cut out — not in)

UNIT 5. THE SCHOOL DRESS OF COTTON, LINEN, OR RAYON

There is just one simile that comes to mind when you see the clothing laboratory at the time you girls are making your cotton, linen, or synthetic-fiber dresses and that is a summer garden of bright flowers just after a summer shower. All the blooms are so fresh, clean, and perky. There is a riot of color as you walk down the garden paths. So there is perkiness and gay color hanging on the racks in your laboratory.

The perkiness may come from the dress material or from the trimming. Is there anything more crisp than organdy ruffles? The color may be in the dress material or it may be found in the trimming. Plain gingham or chambray may set off a dress with checks, stripes, or plaids.

Bias tape which says, "I belong on dresses worn in school," and rick-rack braid that pipes up to say the same, are frequently the accent that makes a dress distinctive.

Lace and organdy trimming say, "I belong on clothes for party days, special occasions."

The effectiveness of the trimming is dependent on its accent value and its intelligent use. A green-and-white dress may be trimmed with green-and-white organdy flowers, but plain green ones would be more stunning. A concentrated use of trimming is usually much better than a scattering of it all over the frock. It's the same principle exactly as the garnish on a platter of cold meat. One big bunch of parsley and a small sprig of it make a more attractive platter than a hedged one. Use trimming with dash but with restraint. And that, let me tell you, calls for the practice of the principles you learn in art classes.

In choosing the material consider the ease of working with the fabric. Materials that crease easily, hold their creases, fray, or slip or slide about very little are infinitely easier to work with than the majority of the synthetic materials. It is wise to choose an easy pattern and easy material for your first dress. You get along so well with that that you are encouraged and are ready for a more difficult one in almost no time at all. But if you start with a complicated affair and add to your difficulties with a hard-to-handle material, you think you never will get through.

Shall we consider cotton for the first dress? We are smart if we do, smart in more ways than one, for King Cotton is ruling the fashion world at present.

But whatever the material may be, you have a procedure that is almost a ritual to follow. Here it is.

First: select a pattern that takes into consideration the places — home, school, church — where the garment is to be worn; that is the fashion-of-the-moment modified by the style that is kind to you; that is considerate of your pocketbook in so far as required material is concerned; and that is not beyond your sewing skill.

Second: purchase material that is fast colored, durable, and suited to the type of dress you are making.

Third: pin the pattern and slip it on to see whether you need to make alterations to fit your own figure.

Fourth: press the material to remove wrinkles before laying on the pattern.

Fifth: lay pattern on goods following pattern lay-out. Pin pieces to material, placing pins parallel to cutting edge.

Sixth: cut out the pieces exactly; cut notches *out* instead of *in;* mark all construction guides, perforations, and so forth.

Seventh: construct the garment, pressing seams frequently during the process.

This procedure with its seven points is followed regardless of the type of frock you make.

Each textile presents its own problems of construction and handling, of course. Cotton materials crease easily, "stay put", do not sag or stretch. In fact, they have many virtues.

If you made a smock previously, you are familiar with certain problems that would be new to you if you chose an apron, or sleeveless pajamas, or slip in your earlier class.

Sleeves present difficulties. You must remember that you need to reverse your pattern to get usable sleeves unless you want to make two sleeves for one arm. Or if the material is the same on both sides, then you don't reverse the pattern, but you must be sure the seams are taken in such a way that one sleeve fits the left arm and the other one the right arm.

If the school dress you make happens to be a two-piece dress, you need to consider putting the skirt onto an under-waist foundation of some sort. The skirt hangs better. It relieves the pull and drag, eliminates sagging, and allows you to keep your skirt in place without a tight waist band.

The slip waist to which the skirt is attached will make the dress warmer in the body, but it will prevent the shoulders of the outer dress being stained with perspiration.

The chances are that you will be taller next year than you are now. It seems wise to consider some method of lengthening a dress. If you can put a tuck on the inner part of the skirt, just above the hem, that tucked material will look like the rest of the dress when the skirt is let down. It won't show a streak of brand-new goods.

CLASS ACTIVITIES

1. Go to a nearby store and see what kinds of school dresses they are selling; what kinds of house dresses.
2. Make a collection of samples of fabrics suitable for house or school dresses.
3. Try these samples for fading and shrinking.
4. Make a list of these fabrics together with the width and the price per yard.
5. Use a recent pattern book for reference and pick out designs or patterns which you think might be suitable for you for a school dress, a house dress, or a smock. Bring these pictures to class and ask others to criticize your selections.
6. Before you make your dress, make out a working plan for yourself. See how well you can manage your time. Find out if

this is easier for you than when you made your undergarments. You should be definitely gaining skill in planning your work so that you will complete it in the time you set for yourself.

7. You might like to carry on a home project in which you will plan a spring and summer wardrobe for yourself or for some member of your family. The plan for the project should include:

a. Making an inventory of the clothing on hand
b. Putting into repair the wearable clothing (if necessary)
c. Planning for clothing needed for the season
d. Deciding as to which garments should be constructed and which purchased ready made
e. Making new garments (if necessary and advisable)
f. Buying ready-made garments (if advisable)

TEST: *Selection of Suitable Constructive Processes*

Directions: In each of the following exercises a statement is made which needs completion. Below each statement are two lists of phrases. The first list contains phrases which can be used to complete the statement correctly. The second list contains statements which can be used to explain the right answers. Choose from the first list the phrases completing the statement correctly, and from the second the phrases explaining the reasons for your choice. Write your answers on a sheet of paper, not in your book.

1. In putting a garment together, it is wise
a. when basting together straight or gored edges, to lay the straight edge on the table and the bias edge on top
b. when basting together straight and gored edges, to lay the bias edge on the table and the straight edge on top
c. when basting together two bias edges, to place the more bias on top, the less bias on the table
d. when basting together two bias edges, to place the less bias on top and the more bias on the table
e. to run a line of fine basting around the neck line, shoulders, and tops of sleeves
f. when basting a sleeve in, to hold the sleeve side of the seam toward you

Choose the reasons for the answers given.

g. a straight edge will stretch more easily than a bias edge
h. a bias edge will stretch more easily than a straight edge
i. the more bias the edge, the more it will stretch
j. the less bias the edge, the more it will stretch
k. the neck line is a bias edge
l. the more bias edges are handled, the more they will stretch
m. a line of fine basting will not keep the bias edges from stretching
n. a line of fine basting will keep a bias edge from stretching when handled

2. In finishing the hem of a wash dress
a. a wide hem should be put in by hand
b. a wide hem should be put in by machine
c. it should have the first turn stitched and then be sewed down by hand
d. it should have the first turn basted in and then be stitched down
e. it should have the first turn stitched and then be stitched down

Choose the reasons for the above answers.

f. hems are put in by hand so that the hem will be inconspicuous
g. hems are put in by machine so that the garment may be lengthened or shortened easily
h. hems are put in by hand so that the garment may be lengthened or shortened easily
i. the first turning may be stitched by machine before the hem is sewed down in place, to prevent fraying and to make the edge firm
j. hems are put in by machine so that the hem will be a decoration

3. In making a dress
a. if print, the underarm seams and skirt seams might be plain seams, overcast
b. if voile, the seams should be plain seams, overcast
c. if gingham, the underarm seams and skirt seams might be plain seams, pinked

d. if heavy rayon, the seams might be plain seams, pinked
e. if cotton piqué, the seams should be flat-fell seams

Choose the reasons for the above answers.

f. use a plain seam overcast, if fabric is not sheer enough for seams to be visible, and the edges would fray
g. a French seam may be used if fabric is sheer enough for seams to be visible, and the edges would fray
h. use a plain seam pinked for outer garments the fabric of which is not sheer and which does not fray
i. a lapped seam is often used in joining a skirt to a yoke or where outside stitching adds to the appearance of the seam
j. a flat-fell seam is used where a tailored appearance is desired and where a flat and durable finish is necessary

4. In fitting a dress
a. the shoulder seam should run in a straight line so that the line does not appear to go backward or forward on the top of the shoulder
b. the shoulder seam should run diagonally across the top of the shoulder
c. the underarm seam should run straight from the center of the underarm
d. the underarm seam should run diagonally from the center of the underarm
e. the underarm seam should run perpendicular to the floor

Choose the reasons for the above answers.

f. it is essential to watch the grain and keep it straight
g. it is not essential to watch the grain and keep it straight
h. the crosswise grain of the upper arm of the sleeve should run parallel to the floor
i. the lengthwise grain of the sleeve should run parallel to the floor
j. the lengthwise grain of the center front and back should be perpendicular to the floor
k. if the shoulder line goes forward, it gives a round-shoulder appearance
l. if the shoulder line goes back, it gives an over-erect appearance

UNIT 6. THE TAILORED DRESS

When we use the word "tailored", we think of something trim and trig. A man's suit, his overcoat, or his shirt come to mind. There is a well-made look to these clothes. It is that look we want to get in the dress we now are planning.

We used to think of a tailored dress in terms of wool only. But there are tailored suits of piqués, of soft silks, even of net. So wool cannot longer be the only material we consider suitable.

Since the use of cottons, silks, and nets are more or less a thing of the moment and since we shall always have tailored dresses of wool, suppose we consider wool first and then later discuss the special points to be observed in making a tailored garment of any material.

We are justified in saying that it is harder to make a wool dress than a cotton one because wool, generally speaking, does n't stay "put" as well as cotton. Think, for instance, of the way in which organdy may be creased for a hem and then think of trying to get a hem in wool easily.

Since we are going to spend a bit of money for the material, it behooves us to purchase it intelligently. We need to know whether we want the soft-finish wool or the hard-finish worsted. We ought to know whether the material is "virgin" or "reworked" wool.

There are definite laboratory tests for wool. But you can't well apply them in the ordinary shopping trip. It would seem wise to say that you should deal with a reliable store that insists on truth in advertising and truth from its salespeople.

We need to know whether the material has been sponged and is ready for tailoring.

If you buy unsponged wool, you may do the sponging at home. Here is the method. Wring a sheet or long piece of unbleached muslin out of water. The cloth should be damp but not wet. Lay it over the woolen goods that have been stretched out flat and wrong side up. Roll the two, the wool and the cotton, in jelly-roll fashion. Let the material stay this way for three or four hours. Then unroll it, keeping the dampened cloth on top of the wool. Use a warm iron to press the material. Even though you have the damp cloth between the wool and the iron,

you still keep the wool with the wrong side up. That is a safe rule to follow when working with synthetic materials, wool and silk. Always press on the wrong side.

When you buy the material, be sure that you choose a color and texture that is kind to you and does complimentary things for you. Wool is opaque and does not have the high lights of a more highly surfaced material. That means color and texture of wool may affect your skin differently.

Some wools have a decided "fuzz." This may prove irritating to your skin. Just because a certain weave happens to be the fashionable one of the moment, this offers no valid reason for buying something you can't wear after the dress is made.

Wearing a silk slip does two things — it keeps the wool from close contact with the skin and, therefore, avoids perspiration absorption, making dry cleaning less necessary, and it keeps the wool fabric from rubbing directly against the skin. Slips may be easily laundered and done more cheaply than whole wool dresses.

None of you should want to wear a dress that has the traces of body or perspiration odors clinging to it.

Wools are apt to be bulky; therefore, we should learn new ways of finishing seams. The pinked seam, the seam pressed open with the raw edges bound with flat silk tape, the hem with the tape stitched on the raw edge and then cat-stitched to the body of the skirt, and the flat-fell seam are all used on occasion.

Buttonholes are seldom worked with twist or silk, but are bound with self-material or contrasting cord.

The most meticulous attention is paid to detail. When you

make a wool dress, you get well acquainted with the pressing iron. Directions read something like this: stitch, press, stitch, press. It is quite impossible to leave the pressing until the dress is finished and then hope to press it into shape. That kind of work is never as satisfactory as the kind where you press as you go.

You will want to put shields in the dress. A good shop never sends out a frock without shields. They are sewed in cleverly. The first stitches are taken through the inner covering as it fits into the arm hole under the arm. Care is taken to avoid stitching the rubberized interlining. Then the extreme points of the curve are caught to the seam at armscye.

Next, the lowest part of the flap is caught to the underarm seam. This is done by making a loose stitch similar to a French tack, only the stitch is buttonholed or wound with thread to make a stout cable. This is repeated on the flap that extends into the sleeve. By using this stitch there is a certain amount of give to the shield. It is less likely to tear the dress material.

Another bit of good finishing done by the smart shop is the sewing-in of lingerie straps. These are made of narrow silk tape, narrow hemmed strips of self-material, or strands of embroidery twist buttonholed their entire length for strength.

One end of the strap is attached by firm stitches to the shoulder seam. The other is finished with a small snap. The corresponding part of the snap is sewed to the shoulder seam.

The French dressmakers have been depending for the last few years on clever bias cutting, seaming, and draping to get the effect of simplicity. The dress that looks the simplest when finished may have been the trickiest to make. Consult with your teacher before selecting the pattern. You *can* make the intricate one, but it might prove tedious. Better make your first wool dress easily and then be ready for a more difficult one after you have learned the trick in handling wool successfully.

When you have the pattern, be sure you follow the instructions given on the direction sheet. Be sure you follow the cutting chart. You will be saved much ripping and adjusting and useless repinning a little later on if you read and heed before you cut.

The trimming of the wool dress may be self-material. It may be nothing more than well-finished seams. It may be wool em-

broidery or tailored motifs in silk stitchery. Or it may be a vestee, collars, or cuffs of washable material.

Remember that wool dresses must look fresh if you are to be well dressed. That means places which soil easily — cuffs, neck lines — need special attention. That is why washable accessories frequently are used with tailored wool dresses.

Consider the ease of removing and replacing collars, cuffs, vestees, or gilets. Don't fasten them under hooks, snaps, buttons, or loops that have to be removed before you can take off the soiled trimming.

Tailored dresses are truly wearable, so expect great service from the dress you make.

CLASS ACTIVITIES

1. Make a collection of samples of wool fabrics. Mount these on charts or cards, giving the name of the fabric, its price, its use, and its width. Identify the weave of the fabric. Make a table of these fabrics classifying them into woolens and worsteds.

2. List the tests you would use to determine whether a fabric was wool, or a combination of wool and cotton, or wool and rayon. Test yourself on your knowledge of wool fabrics by trying to identify the fabrics in your classmates' dresses.

3. Different members of the class may study style trends in sleeves, necklines, skirt lengths, waistlines, etc. Reports may be given to the class, or scrapbooks may be made to be used by oncoming classes for comparison of present and past styles.

4. Some girls may not make wool garments in class. These girls may work out interesting reports on new textiles, alter a ready-made garment, putting it into wearable condition, and work out some standards by which they might buy such garments more wisely.

5. After you have chosen the design for your dress, test it by the following questions:

Have I taken into consideration in the choice of my design whether

(1) the lines of the dress are in harmony with my type of figure

(2) the lines of the dress are suitable for the fabric I have chosen

(3) the lines of the dress are suitable for the occasions for which I wish to wear the dress
(4) the design shows good proportion
(5) the design shows good use of balance
(6) the principle of emphasis is applied correctly
(7) the decoration is suitable and placed well

6. After a trip to your nearest department store to see ready-made tailored dresses of wool or other heavy fabric, make a list of seams suitable for the dress or skirt you are planning to construct. (If you cannot visit a store, your teacher may need to do this for you.)

7. Ask your teacher to demonstrate how these seams are made. Practice making each kind. Decide which is most suitable for your garment.

8. Practice making the various finishes for hems in tailored garments. Decide which is most suitable for use with your fabric.

9. Make a plan for the construction of your tailored garment. Before starting the construction, make samples of any of the other new processes you will need to use. This may include sleeve finishes, waist-line finishes, and finishes for openings.

TEST: Recognition of Fabrics

Using the packet of fabrics given you, fill out the following outline, giving the name of the material, its use, whether it is woolen or worsted, and the weave used in construction:

FABRIC	USE	WOOLEN OR WORSTED	WEAVE

Be sure you can identify these fabrics before taking the test: Serge, flannel, tweed, wool crêpe, challis, jersey cloth, kasha, basket cloth, and felt.

UNIT 7. THE DRESSY AFTERNOON FROCK

Only a few short years ago the dressy frock would have been made of just one material — silk. To-day we have organza or stiffened organdy, soft and starched cotton, linen or silk lace, rayons of all degrees of beauty, color and softness, wools so supple and lacy they look and feel like silk. Any one of these materials is suitable for dressy clothes.

We talked about cottons when we made our first school dress. We have discussed the problems presented by wool. Let's talk about silk and the luxury of working with it. We'll do that, even though we know all the time that the dress you are going to make and wear to the Prom or Senior Dance will be of sheer wool crêpe or starched linen lace. And for Class Night you may wear billowing organdy. But sometime in your life you will give yourself the luxury of wearing silk. Perchance it will be your wedding dress.

It is quite possible that rayons have permanently changed our attitude toward party dresses. And yet, silk has been, is, and always will be considered suitable for dresses for "best", although modern rayons are growing in popularity. You found wool required a handling different from that used for cotton. Silk handling differs from both of them. It may slip and slide. Taffeta has a delightful staying quality. Chiffons and some of the rayons are as slippery as eels.

In choosing the material it will be wise to heed the words of wisdom of the teacher and salesperson. You may want a wisp of chiffon or georgette. They may advise a crêpe or faille. Heed their warnings. The texture of the material has a great deal to do with the becomingness of the material to you. A silk dress may walk to church with all the propriety in the world, but it will be of a different color and made up in a different style from that which flutters to a junior class night prom. In choosing the pattern consider the occasions on which you will wear the dress.

You need to match the pattern or style and the textile, too. Some silks with no stiffening at all would make sorry bouffant dresses. They would look like pricked balloons. While a silk

with considerable dressing would be impossible for a sheath-like dress that is supposed to cling and swirl about the feet.

In making the silk dress you meet few, if any, new construction problems. In these dresses the finish and workmanship may not be as important as the style. Some French dresses prove most unsatisfactory for real wear because they are put together sketchily. They have style and that is all. You and your teacher need to achieve style and finish and "smart" effect.

CLASS ACTIVITIES

1. Take a shopping trip, if possible, to study the styles and fabrics worn for the season for which you wish to use your dress. (If this is not possible, read the fashion magazines.)

2. Decide on the type of dress you need in your wardrobe and the purposes it will have to serve. Decide on the color which will be becoming and which will fit into the wardrobe.

3. Make a class collection of samples of silk and rayon fabrics. Decide on which are most suitable for the type of garment needed in the wardrobes of the members of the class.

4. Study the characteristics of the silk fiber; the rayon fiber.

5. Find out what tests you may use at home to determine the wearing quality of silk fabrics; for example, the detection of excessive weighting, etc.

6. Give a special report of the manufacturing processes used in the construction of silk and rayon fabrics. (Your teacher may be able to secure films showing these processes.)

7. After you have selected the design for your dress, have your classmates discuss your selection as to whether it is suitable in line and design for your type, for the fabric you wish to use, and for the purpose you have for the dress.

8. Find out from an examination of good ready-made dresses what seams and finishes are suitable for the fabric you have chosen.

9. Before or while making your plan of work for the garment, make a list of special precautions you will need to take when constructing a garment of silk or rayon.

10. If there are new constructive processes you will need to use in the making of your dress, practice these before you start your dress. This will save you time when you are constructing the dress.

11. Check yourself daily by your working plan to see if you are making the best use of your time.

12. Calculate the cost of the garment after you have it made. Compare it with one which might cost the same amount if you had purchased it ready made. Did you secure a better-made garment, and one which will wear better, by constructing it?

13. Some of you may wish to buy ready-made dresses for afternoon wear rather than construct them. These girls may make their plans for buying, do the actual shopping, bring their garments to school for class criticism, and make any necessary alterations.

TEST: The Characteristics of Silk and Rayon[1] Fabrics

Choose the phrase or phrases which complete the statement correctly. Write your answers on a sheet of paper.

1. Characteristics of silk and rayon fabrics are:
   - *a.* rayon fabrics are cheaper than silk fabrics
   - *b.* it is often quite difficult to tell a rayon fabric from a silk one
   - *c.* silk is an animal fiber; when wet, it is stronger than rayon
   - *d.* silk and rayon fabrics are much harsher in feel than cotton or linen
   - *e.* silk is a warmer fiber than cotton
   - *f.* one can easily tell the difference between silk and rayon fabrics
2. Silk if weighted heavily with tin or other metallic salts
   - *a.* will seem like a much heavier quality of silk than it is
   - *b.* will wear well
   - *c.* will be likely to split or fall apart with little or no wear
   - *d.* will wear better than if not weighted
   - *e.* will affect the cost of the product
3. To detect weighting
   - *a.* burn a sample of the silk. If it glows and retains the shape of the sample, it is weighted
   - *b.* burn a sample of the silk. If it burns quickly, smells like burning feathers, and leaves a ball ash, it is weighted heavily

[1] Rayon is used here as a generic name for synthetic and acetate fabrics

c. wash a sample of the silk. If it loses much of its stiffness and is more open in weave, it has been weighted

d. crush a sample of silk between the fingers. If a fine white powder comes from it, it has been weighted

e. crush a piece of silk in your hand. If it wrinkles badly, the fabric is usually heavily weighted or contains rayon

4. We get the silk and rayon fiber from the following sources:

a. rayon is made by a chemical process from cotton linters or wood pulp

b. rayon is made by weighting raw silk

c. the silk fiber is spun by the silkworm

d. silk is a vegetable fiber. It is obtained by treating mulberry leaves with chemicals

e. some silk is spun by wild silkworms rather than cultivated

5. In order to prevent silk, rayon, or sheer cotton fabrics from pulling in stitching, one might

a. hold the fabric tightly, stretching it as you stitch

b. release or tighten the pressure on the presser bar

c. use paper in stitching

d. loosen the upper tension

e. lengthen the stitch.

6. In pressing silk or rayon, observe the following precautions:

a. press every seam as you make it

b. press silk only as much as necessary

c. use a hot iron to remove creases

d. a warm, not hot, iron should be used on silk

e. tissue paper may be used over silk in pressing

f. press silk on the right side to retain the sheen

7. In constructing a garment made of silk, rayon, or sheer cotton observe the following directions:

a. keep the garment tightly rolled in a small space to prevent wrinkles

b. keep the garment as clean as possible as you will not wish to wash it before wearing

c. do not hang the garment up when you must stop working. If kept on a hanger, the neck line and armholes will become stretched

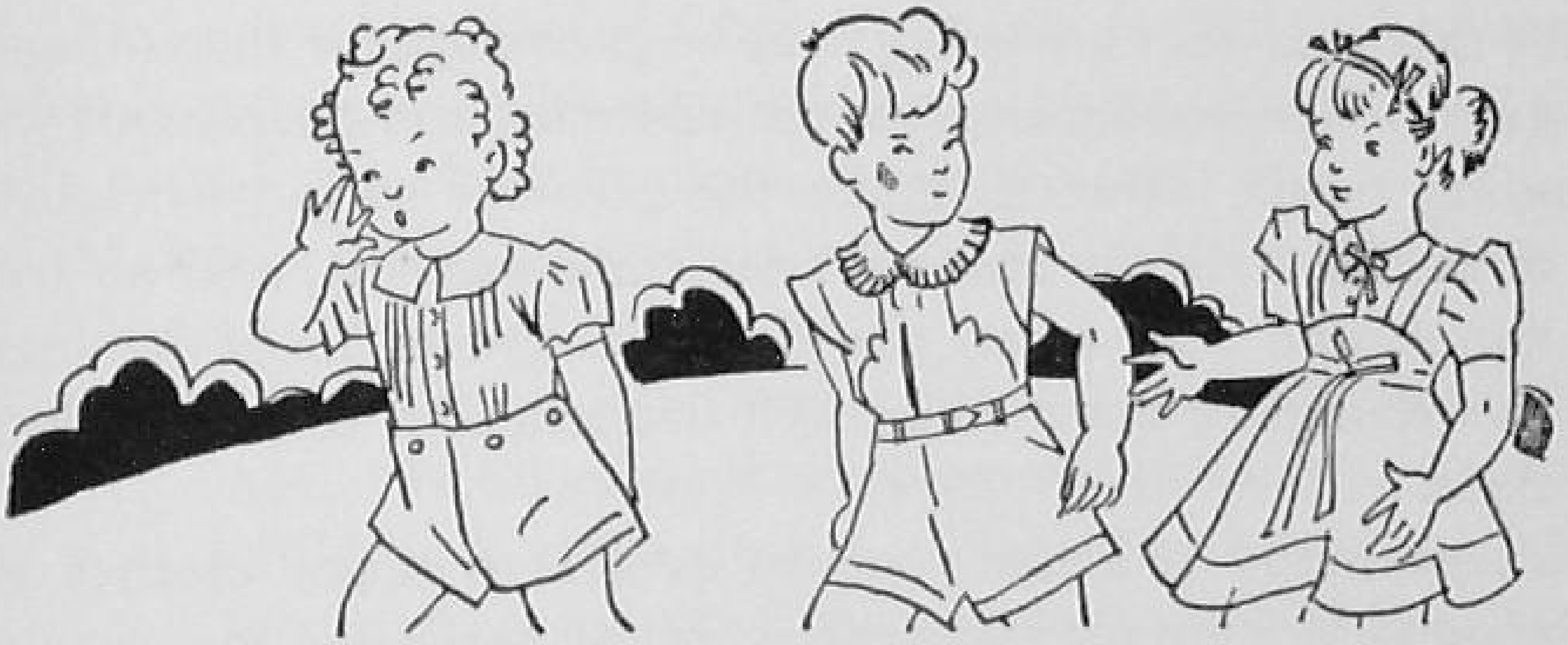
d. keep all bias edges from stretching as much as possible
e. keep the garment as wrinkle free as possible, so no more pressing than is absolutely necessary need be done

TEST: Knowledge of Silk and Rayon Fabrics

Ask your teacher to give you a packet of silk and rayon fabrics to identify by name and tell for what purpose you would use them. Before you take this test, be sure you know the following fabrics and their uses:

Crêpe de Chine, pongee, radium, faille, taffeta, rajah, satin, velvet, georgette, tub silk.

UNIT 8. CLOTHES FOR THE SMALL CHILD



Making clothes for your young brother or sister is more fun than making doll clothes. Your doll wore whatever you made for her and never said a word, but your brother and sister will strut around as proud as Punch when you make something for them.

And aren't they the cunningest things in the rompers or aprons, pinafores or jumper suits?

Since children are active, it is necessary to do better work on their clothes than that you put on the doll dresses. You choose long-wearing material that will stand frequent tubbings. It ought to be color fast, for children can get clothes dirty "quicker'n a wink."

In discussing clothing needs with Mother and your teacher, they both will emphasize the need for what we now call "self-help" garments. The youngster needs clothes that he can manage himself.

It is a great advantage for a child to be able to dress himself and to become independent at an early age. Not only does it relieve you and Mother of the task of dressing and undressing, buttoning and unbuttoning time after time, but it does something fine for the child's morale.

Children have to be dependent on their elders for so many things that it is a joy to the child to find something which he can do, as he says, "all meself." The placement of buttons, the size of them, the firm buttonhole are related to self-help. The "zipper" fastening may be on its way to revolutionize some of the clothes.

In addition to durability and self-help features, there is the question of style.

Children spring up like weeds, but it is a mistake to make clothes this year that are going to be large enough for the youngster next year. Generous seams, concealed tucks, and deep hems meet expanding needs. But to make the garment so large originally that it has no style the first year the child wears it, and no freshness the second year when the child has grown to fit it, means that the youngster never looks well dressed, and that the clothes lack style.

See how many schemes you can evolve to make clothes that will be good looking for two years. It can be done.

Another caution — don't overtrim the clothes. Simplicity is the word which best describes the smartest clothes for children. What little boy of your acquaintance wants to be "Little Lord Fauntleroy" all done up in black velvet, white satin, and lace? How long would that suit last when the child was making mud pies?

When making girls' clothes, it is hard to resist the perkiness of organdy, but organdy is harsh and "pricks." Better choose a softer material for yokes or trimming which comes close to the skin. Perchance you can use organdy for sash, or shoulder tie, or skirt ruffles.

There has been a tendency of late to dress small members of the family alike. That is, two small sisters have clothes made from same piece of material and from same pattern. A small brother and sister have same materials developed into a dress for

girl and small trouser suit for brother. These "brother-sister" clothes, as they are called, are always effective.

And now to work. What are you going to make first? That "cunning" apron or that "adorable" little suit? Whatever you make will bring joy into some youngster's heart. Perchance your young sister will "look like a doll" when you finish outfitting her. Only she will be more appreciative than even your politest doll ever was.

CLASS ACTIVITIES

1. If you have a younger brother or sister, or a niece, or a nephew, discuss with your mother or sister the wardrobe needs of this child. Plan to make a garment for this child, applying your knowledge of the requirements of children's garments.

2. Make a collection of fabrics suitable for infants' garments; children's garments. Mount these in a chart, labeling as to the textile fiber from which they are made and their use.

3. Make a poster, showing suitable garments for children.

4. Discuss these problems in class:

   a. Martha's sister has three small children under six years of age. It takes much washing and ironing to keep these children in clean clothes. Her sister has an ironer and would like more of the garments made flat so that they will be more easily ironed in the machine. What help can we give her in planning dresses for the two girls, one five and the other three years of age, and for the baby brother who is just a year old?

   b. When we visited the nursery, they told us that children could learn to dress themselves more easily if garments fastened down the front. Can we make attractive dresses for our little sisters, when we want to consider front fastening?

   c. Mother wants me to make a dress-up dress for my little sister. She wants it to be dainty and cool, and launder well. What material shall I choose and how shall I make it?

   d. Mary has three younger sisters and brothers; it is her problem to prepare the clothing for the new baby.

What garments will they probably have left over that can be used? What new articles will she need to provide? Which of these should be ready when the baby arrives?

e. Mary's new baby brother or sister is to be born sometime in June. How will this affect the selection of clothing? Why? How will the choice differ from that selected in January?

f. The family laundry is taken care of by the laundress who comes once a week, but it will be necessary for Mary to help with the baby's laundry. How often do you think she would wash and iron? Why? What kind of soap should she use? Where would be the best place to dry the clothing? What time in the day should she set apart for this work? Are there any articles which do not require ironing; if so, what or when? Where would be a convenient place to store clean clothes until they are used again? Dirty clothes until they are laundered?

5. Check the decisions you consider the wisest. See if the rest of the class agree with you. Justify your decisions if necessary.

a. Mrs. Brown has two children, a six-year-old boy and a three-year-old girl. She enjoys sewing and has time in which she may make garments for the children. Her income is quite limited and she must decide whether to

(1) buy ready made all the garments needed for the children

(2) make at home all the garments needed for the children

(3) buy the sleeping garments, underwear, and boy's suits ready made, then make the rest of the needed garments

b. Mrs. Nelson feels that her small daughter should have three distinct outfits: (1) one for social and church occasions; (2) one for school; and (3) one for play. One garment of each kind is needed in the child's

wardrobe for spring and summer. She wants to decide on one of the following combinations:

(1) a simple voile dress, a print dress of small design, a sturdy gingham dress with bloomers to match

(2) three print dresses of different designs and colors

(3) an organdy dress, a silk pongee dress, and a dimity dress

c. Mrs. Winter finds that Jimmy, who is four years of age, has grown so rapidly he needs some new suits. She is faced with the problem of buying these garments and must decide whether she will

(1) buy garments as needed which fit very well; get additional new ones as he outgrows these

(2) buy garments that are much too large, so that he can grow into them and have a greater variety of suits at one time

(3) buy garments which allow plenty of freedom, but are not too large to make the child nervous or affect his posture. She will buy fewer garments this way and let him wear them out before buying new ones

TEST: Fabrics Suitable for Children's Clothing

INFANTS' WEAR		BOYS' WEAR			LITTLE GIRLS' WEAR	
ROMPERS	DRESSES	SUITS FOR WINTER WEAR	USED FOR TROUSERS	USED FOR BOY'S BLOUSES	DRESSES	
					WINTER	SUMMER

Directions: Make a table like the one above, using a full sheet of paper. Choose from the following list of fabrics those suitable for the various purposes given above. In place of writing

the name of the fabric in the column, use the number opposite each fabric to designate the ones you consider suitable.

1. Batiste
2. Broadcloth
3. Cambric
4. Chambray
5. Checked gingham
6. Chiffon
7. Cotton charmeuse
8. Cotton crêpe
9. Cotton pongee
10. Dimity
11. Denim
12. Drill
13. Dotted swiss
14. Galatea
15. Georgette
16. Handkerchief linen
17. Indian head
18. Jean
19. Khaki
20. Lawn
21. Linen
22. Madras
23. Organdy
24. Percales
25. Piqué
26. Pongee silk
27. Poplin
28. Printed or plain gingham
29. Soft cotton print
30. Soisette
31. Suiting
32. Voile
33. Washable wool
34. Wool challis
35. Wool georgette

UNIT 9. CARE AND REPAIR OF CLOTHING

Day-by-day care of clothes is not exciting, but it is plain good sense.

Clothes that are worn day after day get spotty; collars and cuffs become soiled; hems begin to rip; skirts begin to sag; buttons begin to wear loose; fasteners hang by a thread.

If a needle and thread is close at hand and is used to fasten the button as soon as it works loose, or to catch the ripping hem, the amount of time required is exceedingly small, and the dress is always in good repair.

Slightly soiled collars and cuffs are much more easily freshened than the ones worn until they need scrubbing and boiling, and bleaching as well, to bring them back to pristine whiteness.

Shields in a dress need frequent laundering to keep them fresh and sweet. A dress sent to a cleaner when it is only slightly soiled comes back in better condition than the one which needed special care because it was so dirty.

After all, being well groomed means nothing more than taking care of small details all the time and every day. But because the

details are taken care of in time, the expenditure of effort is small.

Shoe men tell us that two pairs of shoes worn alternately will far outlast two pairs in which one pair is worn continuously until worn out and followed by the second pair, also worn continuously.

Mud brushed from shoes, shoes dried over gentle heat when they have been out in rain or snow, will last longer than shoes left muddy, wet, and untreed. Shoe trees keep shoes in shape.

Dresses brushed before being hung on their hangers keep fresh longer than those in which the grime is allowed to settle and work its way in. Dresses hung on padded hangers with faint traces of orris root, lavender, or other mild sachet are pleasant to wear.

Daily care should become so much a matter of second nature that you are aghast at careless Annie who lets her clothes lie around anywhere.

Did you ever read the story of the girl who was a dear, just a dear, but careless as she could be? Her clothes went on the floor, in heaps, wherever she stepped out of them. Her mother scolded. And the girl was always contrite, always promising to do better, but never remembering.

Finally, one day, her mother told her that anything of hers which was left lying around would be thrown unceremoniously in a large hamper which the family called the "glory-hole."

This was a dire threat. But even so the girl — we'll call her Annie — would forget at times. Into the "glory-hole" went a nightgown, a kimono. When she would look for her things and could not find them, she learned to go to the "glory-hole" and there, all crumpled and forlorn, would be the garment.

Finally she seemed to have learned and she boasted gaily that never again would her mother have to throw anything in there.

One day she wore a new dress, a lovely thing of rich red crêpe. She was so proud of the dress. Every time she took it off, it was carefully hung on the hanger. Never again would her mother catch her, and never would that dress, her beloved possession, go on the floor.

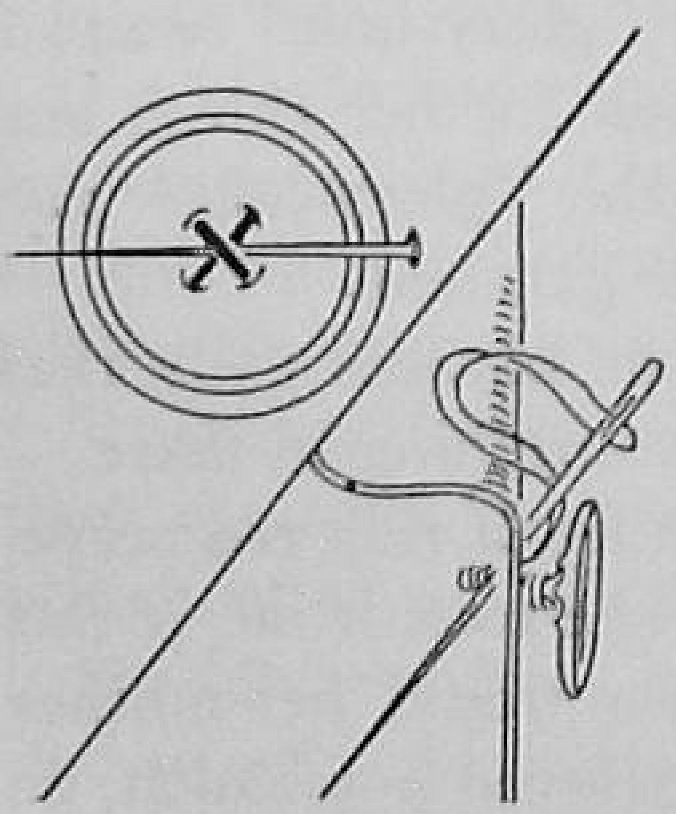
One night she came home, dead tired, and stepped out of her clothes. Next morning she woke late and dressed while half asleep. When her mother came upstairs to make the beds, she

found Annie's beautiful crêpe dress in a heap on the floor. Poor mother, she was tempted to hang it up and say nothing. Annie had been trying so hard and was so proud of her red crêpe dress. There was a special party that night, too, and Annie was planning on the dress. But her mother knew that Annie had to learn some time. She put the dress into the "glory-hole." It lay there, a crumpled heap, looking reproachfully up at Annie's mother.

That night when Annie started to dress, her mother heard her joyful caroling cease. She heard her fumbling in the closet, going back a second and third time. She heard Annie go into the room that held the "glory-hole." And then there was silence. When she went upstairs, Annie was sobbing on the bed. There was no party that night for Annie. After that, her dresses, and all her belongings, were put in place. The "glory-hole" had taught its lesson. Do you need a "glory-hole" at your house?

When putting clothes away for the season, be sure they are well brushed and free from spots. Don't leave cotton dresses unwashed. Don't put furs in warm places and expect them to keep their natural oils. Don't trust to cedar chests and moth balls to keep out moths.

Woolen garments must be clean, free from larvæ, and placed in hermetically sealed containers if you hope to have whole garments when you take them from storage. A piece of black felt or wool placed in the dark part of your dress closet is a good place to observe the presence of any moths. They are apt to hunt dark undisturbed places. Since the material is black, you can see them readily. And once you find they are in a closet, do not relax your vigilance until you are assured there are no moths, no larvæ on any woolen or fur-trimmed garment in the closet.



Don't expect clothes to mend themselves while they are put away. Sew on buttons, fasteners, tighten straps, patch, and darn before putting away the garments. Then they will be ready to wear when it turns unexpectedly hot or cold and you dash upstairs to get what you want.

CLASS ACTIVITIES

1. Check yourself on your grooming habits. A checking list for good grooming is given below.

a. Is my dress clean and well pressed?
b. Does my dress fit?
c. Are my collars and cuffs clean?
d. Is my hair clean, brushed, and neatly arranged?
e. Are my shoes clean and polished?
f. Are my heels straight?
g. Are my hose in good condition, neatly mended and suitable?
h. Are my undergarments clean?
i. Is my make-up not excessive and is it appropriate?
j. Is my jewelry appropriate?
k. Are my hands and nails clean and well kept? Not extreme in manicure?
l. Are my teeth and breath clean and free from odor?
m. Do I bathe frequently enough so that I am free from body odor?

2. Show how cleanliness is one of the most important factors in good grooming.

3. Be able to demonstrate in class how to give a shampoo; how to manicure nails.

4. You should be able to pass a practical test in the following:

a. darning
b. mending tears of various sorts
c. patching
d. proper care of shoes and gloves
e. washing hose and silk underwear
f. simple dry cleaning such as removal of spots and stains
g. sewing on hooks and eyes
h. sewing on buttons
i. sewing on snaps
j. tinting of faded silk slips

5. Do you have a button box at home; a hook-and-eye box; and a snap box? What would be the value of starting a collection of this sort and adding to it as old garments are discarded?

6. Assume the care of your clothing for a period of time. Make a plan for the daily care necessary; the weekly care. Set some standards for yourself in personal appearance. See how much you increase in self-confidence when you live up to your standard. Use the checking list given below at the beginning of the period; again one month later.

CHECKING LIST ON THE CARE OF CLOTHING

1. Do you change your school or church clothes when you arrive home?
2. Do you hang up your wraps when you come in?
3. Do you use hangers for your dresses and coats? (Improvised ones will do.)
4. Do you air the clothing that you wore during the day?
5. Do you keep your stockings washed and darned?
6. Do you take the proper care of your shoes (mud cleaned off and shoes polished when needed)?
7. Do you mend clothing as soon as it is torn?
8. Do you press your clothing when it needs it?
9. Do you sew on loose hooks and eyes or snap fasteners?

If you can answer "yes" truthfully to these questions, you should present a good personal appearance. If you cannot answer in this way, you might like to take this as a project for several months and see whether others do not remark about your improved personal appearance.

7. Take a trip to a commercial laundry; a dry-cleaning establishment.

8. Make a plan for improving your storage space for clothing. This may include improvising a wardrobe if you do not have one. This may be undertaken as a home project. You might make some covers for garments in storage.

PROBLEMS CONCERNING THE REPAIR OF CLOTHING

1. Jane finds last winter's choice dress (flannel) with a small hole in it. She decides that she will do one of three things with it. Which would you advise?

a. Wear the dress without mending the hole. (It is rather small and perhaps few people will notice it)

b. Place a small piece of material under the hole and darn it with as nearly invisible stitches as possible. Then press with a damp cloth from the wrong side

c. Put a hemmed patch on the dress

2. Margaret learns, much to her dismay, that the heels of the stockings which match her favorite dress especially well are wearing very thin. Should she

a. wear the hose until the hole appears and then darn it

b. strengthen or reinforce the heel so that it will not wear through so quickly

c. get a new pair of hose for good wear and wear this pair for school?

3. Mary spilled some coffee on her smock while she was serving breakfast. She can best remove it by

a. spreading the material over a bowl and pouring boiling water on it from some distance above it

b. washing the spot immediately in cold water

c. putting the smock in the laundry and depending on the regular washing process to remove the stain

4. Catherine, much to her disgust, found her sweater with a wretched-looking hump on it where her sister had hung it on a hook. Her sister had found it on a chair where it had been carelessly tossed. She decided that

a. she needed to tell her sister that she should hang her sweater up more carefully next time

b. she should be more careful about where she laid it so that her sister would not find it and hang it up carelessly

c. she should hang it up carefully herself when she came home from school

5. Ruth accidentally stepped in some mud on her way home from school. If she were wise, she would

a. let the mud dry before she tried to wipe it off

b. wipe off the mud as soon as she arrived home

c. forget all about the mud, as it would probably all wear off the next day

6. Joan's winter coat is trimmed with fox fur. She has stopped wearing it as it is getting too warm. She is undecided as to where she will keep the coat during the summer. Which one of the following should she do?

a. Clean the coat, brush it, hang it in the sun to air, then put it away in a sealed bag or cedar chest for the summer

b. Let it hang in her clothes closet and have it cleaned in the fall before she starts to wear it again

c. Fold it up and put it in the cedar chest, then have it cleaned at the end of the summer

7. The girls in the class were discussing the care of shoes. Several of them disagreed as to the proper care. Which do you think showed the best judgment?

a. Elizabeth said she had a shoe bag where she kept her shoes. This hung on the door of the closet. She did not think it necessary to use shoe trees when the shoes were in the pockets of the shoe bags.

b. Mary Lou said that she had a bag for her shoes but that she used shoe trees in her good shoes and stuffed her older ones with tissue paper. She feels that this keeps her shoes in good condition.

c. Dorothy remarked that she thought they were both too cranky. She said that she lined her shoes up neatly on the floor of the closet and that was enough bother.

UNIT 10. THE REMODELING OF CLOTHES

"Return engagement by request" might be an appropriate title for the remodeling of clothes.

Most of us become attached to our clothes and hate to see them wear out. Or we have seen a dress we like on some older sister, cousin, or aunt and admired it tremendously. And now it has descended to us. We are to make it over into something for our very own.

Occasionally there is nothing needed but thorough cleaning and pressing. That spruces up many a seemingly worn-out dress.

Perchance the dress fits to a "T" and needs nothing but some new trimming. A new neck line does wonders. A knotted kerchief worn with a point over one shoulder, or with the knotted ends at the back and the front hanging in a modified cowl, may make the dress appear like new.

Buy a strip of jersey six inches wide. Roll the edges, sew the ends together, wear this slipped through a small strap attached near the center front of neck line of old frock. Button one end of the strap after the strip is adjusted. This scarf then becomes a modified lei.

Lace soft velvet ribbon through bound slits made in pairs down the front of the dress. Bring the ends of the silk or velvet lacing up to tie in large loops near the neck line.

In years when sleeves are the interesting parts of a dress, it is possible to do many things. Slash the original sleeves and insert a plain undersleeve of a contrasting color. If sleeves were full originally at top or wrist, could you reverse them? Make a puff of new material which appears again at neck line, or belt, or sash.

Small jackets, capes, or cape-jackets of sheer material, of silk, of velvet, or lace, make many a dress exactly fashion-right the following year.

A whole new blouse may be added. The old dress keeps its original skirt with enough of the old waist left on, attached to the skirt, to come up as a lily-like sheath above the waist.

Crochet or knit a new yoke top for an old wool or jersey dress. Would n't a belted velveteen or corduroy jacket make an old skirt as smart as if it were just purchased?

Make a jumper dress of the old frock and wear new blouses with it or wear blouses made from other partially worn or hand-me-down frocks.

Make a new top for an old dress, using the upper part of the old waist for a bolero to wear over the new waist.

Sometimes the skirt which is too short may be put onto a fitted yoke and, to conceal that, an entirely new jumper or pinafore top is slipped over or tied on. In all of these cases it has not been necessary to rip the entire garment. When that has to be done, it is wise to rip with care, for where the material is worn, a tug or pull which seems slight may do irreparable damage. A razor blade makes a good ripping tool.

After the garment is ripped, it may be washed or cleaned. Washing may be done much more safely than we used to think possible. Study the rules for safe laundering of synthetic and woolen materials.

Press the material carefully and then lay on the pattern which has been selected for the return-engagement appearance of the garment. In laying the pattern on, consider nap, up and down, right and wrong of material.

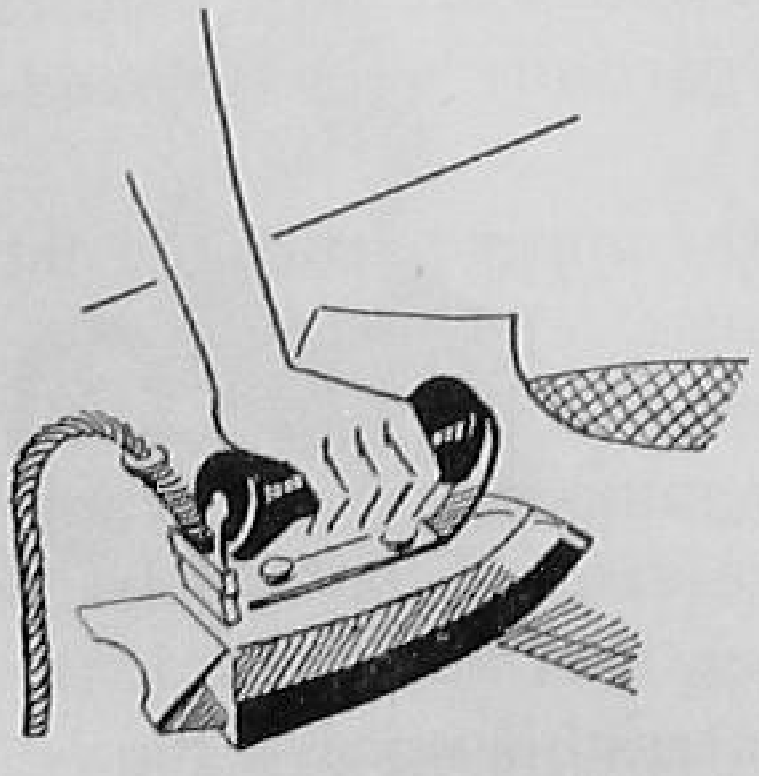
Men's coats may be transformed into coats and suits for small boys. Men's overcoats may reappear as boys' reefers or outer coats.

Men's shirts are usually so far gone that it seems a waste of time, effort, and eyesight to make them over. But occasionally they may reappear as boys' blouses or shirts to be worn with buttoned-on trousers for the child of four or six. Women's coats may reappear as girls' or small children's coats. Women's house dresses make a second appearance as work aprons or slip-over work tunics or pinafores.

Sometimes the material in one dress may be combined with the material in another, making a totally new-looking frock.

New accessories, often purchased for a mere song or even less than that, — a musical phrase — may be used to transform a dress. Bias tape may be used as a trim and a concealment of piecings and seams.

A new belt may perk up a whole dingy dress. Glittering buttons, or buttons covered with self-material, transform a discouraged dress.



Then, when no more making-over can possibly be accomplished, the shreds of material may reappear in hooked rugs, braided rugs, old-fashioned pen wipers, table mats or rugs. Silk stockings are dyed easily and transformed into table mats beautifully hooked and patterned.

To make a second appearance in a stellar rôle, it is necessary that the original garment be completely freshened, washed, and possibly dyed; that it be trimmed simply, but with stunning effect; and that it be pressed until it looks as if it had just come from the smartest shop in town.

THE WELL-DRESSED GIRL

Books to Be Used as References

Baker, Lillian, *Clothing Selection and Purchase*, The Macmillan Company, New York

Baldt, Laura, and Harkness, Helen, *Clothing for the High School Girl*, J. B. Lippincott Company, Philadelphia

Baxter, Laura, and Latzke, Alpha, *Modern Clothing*, J. B. Lippincott Company, Philadelphia

Bradley, Caroline G., *Costume Design*, International Textbook Company, Scranton, Pa.

Brown, Clara, Gorham, Ethel, and Keever, Aura, *Clothing Construction*, Ginn and Company, Boston

Bush, F. G., and Welbourne, F., *Design: Its Fundamentals and Applications*, Little, Brown and Company, Boston

Craig, Hazel T., and Rush, Ola D., *Clothes with Character* (Revised), D. C. Heath and Company, Boston

Dana, Margaret, *Behind the Label*, Little, Brown and Company, Boston

Denny, G. G., *Fabrics and How to Use Them* (Revised), J. B. Lippincott Company, Philadelphia

Donovan, D. G., *The Mode in Dress and Home*, Allyn and Bacon, Boston

Erwin, Mabel D., *Practical Dress Design*, The Macmillan Company, New York

Evans, Mary, *Costume throughout the Ages* (Revised), J. B. Lippincott Company, Philadelphia

Evans, Mary, *The Story of Textiles*, D. C. Heath and Company, Boston

Friend, Meta R., and Shultz, Hazel, *Clothing*, D. Appleton-Century Company, New York

Fry, Gladys W., *Embroidery and Needlework*, Sir Isaac Pitman and Sons, London

Hawes, Elizabeth, *Fashion Is Spinach*, Random House, New York

Hawes, Elizabeth, *Good Grooming*, D. C. Heath and Company, Boston

Heller Committee for Research in Social Economics, *Clothing Budgets*, Heller Company, University of Southern California

Hempstead, Laurene, *Color and Line in Dress* (Revised), Prentice-Hall, New York

Hess, Katherine, *Textile Fibers and Their Use* (Revised), J. B. Lippincott Company, Philadelphia

Kinyon, Kate, and Hopkins, Thomas, *Junior Clothing* (Revised), Benjamin Sanborn and Company

Lester, K. M., *Historic Costume*, Manual Arts Press, Peoria

Lewis, Ethel, *Romance of Textiles*, Prentice-Hall, New York

McFarland, Frieda M., *Good Taste in Dress*, Manual Arts Press, Peoria

McGowan, Ellen C., and Evans, Mary, *A Guide to Textiles*, John Wiley and Sons. New York

McGowan, E., and Waite, C., *Textiles and Clothing* (Revised), The Macmillan Company, New York
Morton, Grace M., *The Arts of Costume and Personal Appearance*, John Wiley and Sons, New York
Pryor, William C., *The Cotton Book*, Harcourt, Brace and Company, New York
Rathbone, Lucy, and Tarpley, Elizabeth, *Fabrics and Dress* (Revised), Houghton Mifflin Company, Boston
Ryan, Mildred Graves, *Your Clothes and Personality* (Revised), D. Appleton-Century Company, New York
Thomas, Mary, *Dictionary of Embroidery Stitches*, William Morrow and Company, New York
Todd, Elizabeth, *Clothes for Girls* (Revised), D. C. Heath and Company, Boston
Trilling, M. B., and Williams, F., *Art in Home and Clothing* (Revised), J. B. Lippincott Company, Philadelphia
Weiss, E. B., and Mermey, Maurice, *The Shopping Guide*, McGraw-Hill Book Company, New York
Williams, Beryl, *Fashion Is Our Business*, J. B. Lippincott Company, Philadelphia

PERSONAL CARE

Cades, H. R., *Good Looks for Girls*, Harcourt, Brace and Company, New York
Cades, H. R., *Handsome Is as Handsome Does*, D. Appleton-Century Company, New York
Navratil, Lillian, *Rating Scale for Personal Appearance*, Manual Arts Press, Peoria
Reid, Lillian, *Personality and Etiquette*, D. C. Heath and Company, Boston
Stote, Dorothy, *Making the Most of Your Looks*, Frederick A. Stokes Company, New York

FAMILY CLOTHING

Brooks, Edmonds, *Design, Line and Color in Men's Clothing*, Fairchild Publications, New York
Burnham, Helen, Jones, Evelyn, and Redford, Helen, *The Boy and His Daily Living*, J. B. Lippincott Company, Philadelphia
Nevin, Emma D., *His Clothes and His Appearance*, State College, Cornell University, New York

Other References

Bulletins from the extension service of state universities such as:
"Aids in Good Grooming," Publication 206, Agricultural Extension Service, University of Tennessee, Knoxville

Bulletins and charts from the government such as:
"Clothing Selection" (Set of nine black and white charts), Superintendent of Documents, Washington, D. C.
Bulletins from commercial firms such as:
"Book of Smart Dressmaking," Vogue, Condé Nast Publications, Greenwich, Conn.
"Dressmaking Made Easy," McCall Corporation, New York
"School Sewing Service News," Simplicity Pattern Company, New York
"Singer Sewing Library," Singer Sewing Machine Company, New York
"Study of Utility Garments for Men and Boys," Textiles Education Bureau, New York
"White Sewing Course," White Sewing Machine Company, Cleveland
"Home Economics and Rayon," American Viscose Rayon Corporation, New York

CLOTHING FOR CHILDREN

Bulletins from U. S. Department of Agriculture, Washington, D. C., such as:
"Sun Suits for Children," leaflet number 24
"Suits for the Small Boy," leaflet number 52
'Little Girl's Dresses," leaflet number 80

III. THE WELL-PLANNED AND FURNISHED HOME

UNIT 1. THE TELLTALE EXTERIOR

LANDSCAPING

When the group you invited for Sunday supper comes trooping up the walk leading to your house, what do they see? Anything which gives them an indication of the kind of people who live in the house?

Did it ever occur to you that your front yard and porch tell a revealing story to the observant passerby?

Let's take a walk down the street and see what we can find out about the residents.

Here is a house that has great sweeping shrubs at the corners of the lot. They reach over onto the sidewalk. The front windows are concealed behind great masses of shrubs too.

Next to it is a house with a well-cared-for lawn. Shrubs are placed exact distances from one another. The house is a bungalow, but the planting is as formal as that found in a French garden.

Next we come to a house with a large weedy lawn. Flower boxes filled with gay petunias are at the front windows.

Next is a well-kept lawn, but the planting never seems to stay the same for more than a month or two. Things are being transplanted and changed continually.

Just beyond that is a dreadful lawn. In the middle of it is a scrub of a dying tree tied to a support with a rag that flutters in the breeze. The rag looks as though it had been fluttering there for a year. As we walk past, we see a book store delivering a large package and the postman laden with magazines.

What can you tell about the families? Don't you suppose that the overgrown shrubs that conceal the house and clutter up the sidewalk belong to a selfish family? They want to live a life of their own, with no consideration for others.

In the lot with the newly planted shrubs there lives a family who rent their house. The landlord wants to keep his property attractive, but the renters have no pride and don't want to be bothered by upkeep.

The informal house with the formal planting belongs to a woman who is a good housekeeper but lacks a sense of the fitness of things. Her yard is planted with the grandeur of an estate when it should give a charming cottage effect.

The window-box lady loves color. She would like to have a nice yard, but her husband won't cut the grass nor pay for proper upkeep. She can manage the window boxes herself.

That well-kept lawn, combined with constantly changing planting, belongs to a woman who can't make up her mind and abide by her own decisions. She is the kind who has dresses sent on approval and returns them. She can't make a plan and stick to it.

The unkempt yard with the fluttering rag and the dying tree belongs to a woman who has a college degree, goes to many club meetings, and belongs to garden clubs but does n't apply what she learns to actual living.

Would n't it be fun to get acquainted with the people and see whether our guesses were right?

Now walk up to your house, trying to look at it with the eyes of a stranger. What do you see? Too much planting, too little planting, lack of balance between the architecture of the house and the shrubs and trees?

At any rate we are glad to see the shrubbery, for architects and landscape architects are agreed that houses need shrubs, trees, grass, and other growing things about them. Planting is usually

divided into foundation planting, group planting, specimen planting, sod, hedging, edging, and ground covering.

The foundation planting ties the house to the ground on which it sets, softens outlines, covers unsightly foundation stones. It should emphasize or harmonize with the structural lines of the house. In putting this shrubbery in, you must remember that trees and shrubs have a way of growing tall and bushy. Even at the expense of the looks for the first year or two the planting must be done with this later growth in mind. Otherwise you have a jungle.

Group planting may be in corners of the lot, at bends, or on curves in long approaches from the street to the house. Here again you must remember that shrubs spread. Houses on corners of streets should not put in such heavy group plantings at the corners that traffic views are obstructed.

Specimen or individual planting is usually that of a single tree or large and ornamental shrub. An evergreen tree is not as satisfactory on a front lawn as a spreading deciduous tree. The evergreen is bushy at the base and obstructs the lower part of the house. Spreading fruit, nut, or ornamental trees are wider at the top. Their airy branches offer pleasing effects of light and shade on the house itself and do not obstruct the view of people living in the house. There is no reason why nut trees cannot be used for shade in city lawns.

Grass is a satisfactory carpet to cover the wide expanses of lot between the sidewalk and the house or between the house and the road. Each locality has its own special variety or mixture of grass seed best adapted to it. Creeping-bent makes a dense green carpet but may prove spotty. Kentucky blue grass, clover, and a small amount of bent is popular in many parts of the country.

In the fall lawns often become infested with crab grass. Before cutting the lawn, it is wise to rake it carefully. This raises many of the shoots of crab grass so that the mower gets them. Crowding out weeds and crab grass by plentiful sowing of grass seed, especially in the early fall when it has a chance to get a good start before winter, is advised by many lawn experts. The use of bone meal is recommended if care is taken not to use it so generously that it burns out the grass. That same fault in greater degree

may be found with commercial fertilizers. Bone meal fertilizes slowly but surely. An application in the spring and another in the autumn is recommended.

Of late years the horticultural market has been filled with peat moss and peat humus. Neither one of these is a fertilizer. But they do break up the soil and give substance to which nodules that manufacture nitrogen may cling. Peat moss is a good material to use for mulching, especially for evergreens.

Good top-soil is growing increasingly difficult to obtain. Much of it is just the top skimming of meadows. In that top-soil you get large quantities of weed seeds. But when good rich top-soil can be obtained, it is highly desirable. Mix that with peat moss or peat humus and you are enriching and lightening heavy clay soils.

Hedging and edging planting is popular at present. It offers a division line that is more pleasing than the iron or picket fence. This is especially true of city lots. Privet and barberry are the two shrubs used most frequently. Barberry is a flame of color in the fall.

Some of the evergreens make desirable hedges — box, for instance. Box and yew are old-world hedgings. They do not winter well in the northern part of the United States. They belong, too, on rather formal estates and not on the small city lot on which a Cape Cod house has been built.

Most landscape architects advise pruning of privet in the fall. On small lots it is wise to keep it trimmed rather low with a rounded or straight-cut top. Ornamental curves and balls seem out of place.

Ground coverings, which hide bare spaces around the foundation planting, are best found among the broad-leaved evergreens. Pachysandra and euonymus are two good ground coverings Myrtle will sometimes grow under trees in shady places where no other ground covering can be made permanent. In the city it is unusual to find perennial borders or annual beds in the front yard. These seem too informal for approaches to houses. But flower beds add much to country homes with their large inviting lawns and approaches.

The growth in popularity of the rock garden has brought color to many front yards. The rock garden is frequently built along the sides of the drive into the yard. This may best be done when the surrounding ground is higher than the drive. To keep the exposed ground from washing into the drive, an arrangement of rocks with small plants growing in the crevices is recommended.

Front yards have color in the early spring when the crocus, snow drops, grape hyacinths, chionodoxa, tulips, daffodils, and jonquils blossom against the background of the evergreen foundation planting. The greenness of this planting makes a better foil for the small colorful spring flowers than do the bare stalks of shrubs. These shrubs come into leaf and flower later and are a pleasing part of the foundation planting, but back of them should be the evergreens.

Landscape architects dislike to see a winding walk leading to a house on a small lot. They say that walks wind to give new and unexpected views and vistas as one rounds the bend. That is impossible in thirty or forty feet of lawn.

A backyard serves many purposes. All the children of the neighborhood may congregate in this yard to play. Mother may need the yard space for hanging out the clothes. Brother may use part of it for rabbit hutches. Father may need room for working on the automobile.

But let 's hope that some of it may be devoted to a garden.

What makes a backyard attractive? It takes more than neatness, although that is a factor. The yard with empty cans, garden tools, clothes poles, dirty paper, sloppy garbage can is not attractive. But a backyard might be kept with meticulous care and still lack any attractive appeal.

It takes a garden, or a grass plot, or a pool with growing things about it — any or all of these — to give charm to a backyard.

The first consideration is the framing in of the owners' property, or, in the country, the separating of home grounds from the production part of the farm. This may be done with shrubs or low trees which serve as a background for other plants. It may be enclosed with a picket fence, a cypress sapling fence, or with a stone wall or a brick wall, but the boundaries should be defined.

Then unattractive features such as garages, barns, outdoor

toilets, clothes dryers, incinerators, and garbage cans need to be screened from view. Sometimes it is a lattice work that does it, sometimes a high untrimmed hedge.

Next the yard needs to be worked according to some plan. If the yard is small and is broken irregularly with beds, there is a lack of repose. Straight lines, straight walks with their severity broken by the low planting reaching irregularly along the edge, will soften the effect and still give symmetry to the yard.

Most gardens can use a perennial or a shrub border, in addition to the flower beds of annuals planned to give color and also to furnish flowers for cutting and using in the house.

In the perennial flower border try to plant the flowers of the same variety in clumps for color effect. Plan the colors so that the picture, when the blossoms are full, is harmonious. Consider the heights of the plants so that the border is built up toward the back, sloping down toward the front.

Consider the various seasons, counting on snowdrops, chionodoxas, grape hyacinth, and crocus for early blooming; tulips, daffodils, and narcissus for a later time. Plant the bulbs for these spring flowers late in the fall. Put them in clumps or clusters, rather than in straight single rows.

After the tulips are gone the flowering shrubs come on. Then follow some of the lilies and delphinium. After these come the riots of color with roses, columbine, coral bells, veronica, and canterbury bells. Then come the midsummer flowers, followed by the second bloomings of many of the early ones and the appearance of cosmos, gladioli, dahlias, asters, and chrysanthemums.

Marigolds and calendula continue blossoming until late in the fall. So do petunias and nicotianas.

Consider the possibility of lace-vine, clematis, and honeysuckle for the lattice work on the porch Matrimony-vine grows quickly and is decorative with its purple flowers and scarlet berries.

Roses deserve separate beds, clay ones with good drainage. The time of pruning roses depends on the variety. Climbers are pruned as soon as they have finished blooming. Hybrid tea roses and roses of that type are pruned early in the spring.

Certain plants like rhododendrons require an acid soil. Rotting oak leaves furnish acid material. Test the soil near the rhodo-

dendrons and other broad-leaved evergreens. Blue litmus paper inserted in the soil should turn pink if the soil is acid. There are commercial powders which may be used to acidify the soil.

"Direct access from the living room or dining room onto a terrace, garden, or lawn area is desirable. A paved terrace of some sort is advisable. It should be of sufficient width to allow a table to be placed upon it with chairs on either side with space enough to walk around. This means a minimum width of twelve feet and preferably wider for comfort.

"One thing to be religiously avoided in any development is a cluttering up with too much fussy and unrelated details. This is particularly true of a naturalistic treatment. Simplicity and directness with general masses in proper proportion are much more livable than a collection of odds and ends which bear no relation to each other even though they may be of great value as individual objects. On the other hand, well-designed small details add much charm to gardens if used properly in relation to a general plan."[1]

The vegetable garden is a whole subject in itself. See "Blue Book of Canning" material in appendix.

While you are studying catalogues or visiting the seed stores, learn about the various dusting powders, liquids, and sprays needed to combat insect pests. Some pests suck the juice from leaves. Others bite their meals from the foliage. Different medicines are needed to kill the pests.

One clever gardener took her unused garage and fitted it up as a "bug's bar." She painted the shelves a gay blue. On them she put her containers, also blue, with the various eradicators. Her tool handles were painted blue. She hung these on the wall. By drawing on the wall an outline of the utensil as it hung on the nail, she was able to detect a missing tool at once.

The stool, at which she sat when she mixed the poisonous potions for the garden bugs, was painted blue and was gaily cushioned. She made great fun out of the hard work of eradicating garden pests.

Study books, read garden magazines, visit flower shows. Keep

[1] Taken from a broadcast given by Mr. Haddon Alexander, landscape architect of Cleveland, Ohio

abreast of the times and count any year lost which does not see at least one new variety of plant or flower grown in your garden.

If you have a sunken garden, be sure the walls are well fortressed so the effect is not a crumbling one.

If you have a pool, try to conceal the concrete sides with growing plants.

If you make a rock garden, use stones indigenous to your locality and try to fill in the chinks with growing things so that the garden looks as old as the stones which help to make it.

If you use a sun dial, bird bath, fountain, or garden statuary, place it at the end of a vista and in a spot where it seems at home. Don't let it stand in the garden like a sore thumb, out of place everywhere.

Bird houses, feeding stations for winter, nesting-material stations for spring, and bird baths for summer, will help to attract and keep the birds near your home.

"A garden is a lovesome spot."

And now that we have the garden and the planting settled, let 's look at the house.

Architecture

In your study of the landscaping of the houses on the street, did you pay any attention to the houses themselves? Did one of them need paint? Would blinds have improved the appearance of another one? Did you see a house that looked as if it did not belong on the street? Was there any house that had a porch or pillars that seemed to overbalance the rest of the façade?

Did you notice that low rambling house that seemed to hug the ground and the other one at the top of the street that stood out like a hat that won't fit down on the head?

When you begin to think of houses in this fashion, you are getting into the field of the architect.

The architect's job is to design houses.

His training, which gives him the right and makes him proud to put A I A — American Institute of Architects — after his name, won't let him design a poorly proportioned house, like the one with the huge pillars supporting a tiny porch, or that tall and narrow one which is not at home on the land it occupies.

Why, then, if architects have such good training and genuine feeling for a thing well done, why then, you ask, are there so many poorly designed houses?

The prospective owner may insist that the house the architect designs for him includes the porch he saw on one house, the windows he admired in another, the tower he was so keen about on another.

Or the prospective owner may have purchased a ready-made plan. As a plan it is all right, but as a plan translated into a house for a given spot it may be all wrong.

Or the builder may have said, "I don't need an architect. I'll design my own house. Or I'll ask Mr. Smith — he's a builder — to put up something nice." And the result in any one of these cases proves that terrible mistakes may be made when there is no architect to design, direct, and guide.

Architects spend years and years learning their profession. It would be presumptuous for us to think that a cursory study of buildings could be enough to let us talk intelligently of Dutch Colonial, Georgian, Spanish, or other architectural type. And yet we are going to discuss them now — but oh! so briefly.

To get an understanding of the types of architecture, it is necessary to think of the people in this country who came here with the traditions of their home-land houses. We need to consider the effect of climate on the necessary variation in the original.

When the settlers left England and came to this country, they were not content to live in tents or wigwams as did the Indians. In the first place the settlers had no material for wigwam coverings and in the second place they were accustomed to houses of wood, stone, or brick, and windows of glass.

Their first houses used wood, but it was nothing but hewn logs, and rough and curved with the bark left on. These log cabins had the chinks filled with mud or clay.

Soon a better type was built. It had a sloping roof. It resembled, in simple silhouette, the salt boxes that used to hang

on the kitchen wall beside the stove. Hence the name, salt-box houses.

Next we find Colonial houses, built during the days of the thirteen colonies. Houses were built in Massachusetts, in New York, on Cape Cod, in Virginia — all colonial — but all very different.

Houses built in the cold and wintry north were made compact. Cutting wood for winter fuel was an arduous task, therefore the house was built to use as little fuel as possible. Windows were small to keep out the cold. Ceilings were low to eliminate drafts. Porches were useless, for the long winter made porches seem foolish. Summers were short, and while the days were long, the work was, also. There was no time for enjoyment of living out of doors in the summer twilight.

Shipping and trading was a great industry along the Atlantic seacoast. Many a man had all his capital invested in ships. It was only natural that he should scan the horizon frequently to see whether his ships were coming home. His attic windows were not wide enough in their sweep. He wanted more vision. Accordingly, on his house he built a railed place on the roof called the Captain's Walk or the Ship Walk. Here the owner stood, with telescope at hand, pacing back and forth while he looked for his trading vessels to return from the Orient with silks and shawls, ivories, and fine Chinese porcelains.

In New York we have houses built with the Dutch homesteads in mind. The Knickerbockers used brick, whereas the Cape Cod or New England Colonial used wood. There were many gables in the Knickerbocker houses, again following the home-land tradition.

In Virginia, the Colonial house became rambling, with high ceiling, wide verandahs, tall pillars, many French windows. Slaves did all the housework. Why conserve space and keep them underfoot? Better to put them in a detached wing, better to put the kitchen in a separate wing too, so cooking odors won't mingle with the scent of the jasmine and honeysuckle. In Virginia the days are hot and the nights are long. That means much living is done out of doors on the wide porches or verandahs.

We have, then, three types of Colonial houses: New England,

or Cape Cod, Dutch, and Southern. All were built about the same time but they were adapted, in each case, to the climate. At a little later date America accepted English architecture, mostly of the Georgian era. Here we have formality, balance, dignity, restraint. The ground plan is not as compact as the Colonial of New England, nor as rambling as the Southern. We find irregular wings, ells reaching here and there. The general effect of the English architecture is horizontal and spreading.

When we think of French houses, we think in terms of height and longitude. The buildings reach upward. Many towers, and the main part of the house itself with high-pitched roofs, are typical of the French architecture.

On the Pacific coast, we have a development of Spanish architecture. The padres helped to develop this style. Here the days were hot. The sunshine was intense and blinding.

Stucco in the gayest of colors; roofs of rounded tiles of terra-cotta, placed with a low pitch; small windows, barred heavily, are characteristic of Spanish architecture. Wrought-iron grills at balconies and ornamentation at windows are typical.

Italian exteriors, on the contrary, are severely plain. The walls are massive, heavy, thick; built to keep out the burning sun. Stucco for walls, clay tile for roofs, not too steeply pitched, show the way in which the Italian, both in his home country and in similar climates here, chooses to fortify himself and family against the pitiless sun of midday.

It would be fine were the study of architecture as simple and clean cut as this meagre outline. In architecture — as in fashions in clothes or styles in furniture — one period or style borrows from another, is modified by its neighbor, merges with another, until there are few houses that are pure, architecturally speaking.

The architect is interested in the interior also. From experience he has learned that a house which has a front door opening directly into a living room; which omits a downstairs coat closet; which has any room that has to serve as a passageway, unless that room be a hall; which has a kitchen adjacent to dining room with no small room intervening; which has only one bathroom and that opening off a bedroom; which fails to give privacy to each member of the family; and which lacks storage space is unsatisfactory.

The good architect does n't want to have his client spend all his money for the house, leaving nothing for landscaping and furnishing.

In other words, the architect is interested in the house as but one part of the unit. He wants the right kind of surroundings, the right kind of furnishings, and the right people fitting into that environment. Architects learn more than architecture when they get their training. They acquire a respect for and appreciation of balance, symmetry, and unity.

CLASS ACTIVITIES

1. Take a trip through your community to locate attractive houses. List the factors which make for attractive exteriors of houses.

2. Work out a score card for judging the houses in your community from the standpoint of the factors which you have included above.

3. Identify the common types of houses in your community. You will find very few houses which are pure types, but you may be able to tell what type has influenced the design chosen for the house.

4. Find out if there are any interesting old houses in your community. Discover the date when they were built, where the early settlers in your locality came from, and see if the old houses resemble in any way those found in the part of the country from which the settlers came.

5. Your class or club may be interested in giving a play built around the evolution of the house. If so you may wish to study about and give reports on the stages of evolution. Plays may be written by various members of the class.

6. Find illustrations in magazines and books of the types of houses discussed in this unit. Decide which of these types would seem most suitable in your community, considering the climate, the topography of the country, the building materials available, etc.

7. Find illustrations of art principles applied to the exterior of houses such as (*a*) good proportion, (*b*) informal balance, (*c*) formal balance, (*d*) rhythm, (*e*) center of interest.

8. Make a definite plan for the improvement of the exterior of your home. Include a drawing or sketch of the planting, flowers, and shrubbery around your home. Decide what could be done to improve it this year, next year, and perhaps the next. (Most plans for improvement might well extend over three or more years.) Consider the plants most easily grown, those requiring the least attention yet giving the best results. You might carry out your plans as a home project. Your classmates may be glad to share plants and seeds with you.

UNIT 2. THE REVEALING INTERIOR

When you start housekeeping, do you plan to have a house like the one you live in now? Do you know what changes you would like to make? Would n't it be ideal if you could start with all the money, all the skill, and all the knowledge you needed and build an ideal home? But few of us can do that. We start with what we already have or can afford and then make whatever changes are possible.

Some changes are not a matter of money expenditure at all. One interior decorator took his class visiting each class night. After a talk on line, color, balance, arrangement, or design he would ask the members to rearrange the room of the student in whose room they were meeting on that night. And the pleasing results of nothing more than a rearrangement of furniture were amazing. No money cost was involved at all.

If you should come into your house and look at the rooms critically, would you want to change many things? Throw out that picture of great grandfather which hangs over the mantel? Take out that shabby big chair with its leather covering? Get a new carpet that goes clear to the wall instead of showing some of the floor on all sides? Move that big table up to the attic?

And when you talk to Mother about it, what does she say? Something like this? "Take out that picture of great-grandfather! Why, that has always hung there since we were married. Take that big chair out! Mercy, don't you know how father slumps down in that chair every night? He could n't read his paper in any other chair. Get a new carpet! Yes, I wish we could, but I would n't want it to go to the wall. It 's too hard to

clean. Move that big table up to the attic! Why, there would n't be any place for all of you children to throw your school books, your caps, your home work. It always looks messy, but you don't ever listen when I tell you to put your things away." Does all this sound familiar?

Some things have become so much a part of the house that tradition says "you can't take me out." Chairs have become so comfortable and worn to the hollows of the folks who sit in them that a new chair would make them restless. Some beliefs, such as carpets coming close to the wall being hard to clean, are accepted and never questioned even though vacuum cleaners have come in. And some of the furniture in a home is there because it meets a need that no other piece could fill — that big table, for instance.

But things like that are what makes a house into a home. Custom, tradition give you a feeling of belonging to the house and the house of belonging to your family. Far be it from any of us to want to take the individual, the personal touches out of a home.

But it is quite true that some inconveniences, some color mistakes, even certain furnishings need to be changed. And the house will benefit thereby.

It's hard for Mother to see your viewpoint and it's equally hard for you to accept her decisions. But let's talk it over and possibly we both can make changes.

Let's agree on these points — a house is livable when it has comfort, restfulness, color harmony, or pleasing color contrast. Or, stated differently, when it has charm, life, personality.

When pictures are hung at all heights, when watercolors, prints, oil paintings, chromos are all mixed up on the same wall, there is not much restfulness.

When there is pattern in wall paper, pattern in rugs, pattern in hangings, there is no restfulness.

When rugs are placed at angles, they make the floor pattern disturbing.

When furniture is placed primly along the walls, there is a sense of deadly order which is quite different from easy restfulness. But when furniture is placed diagonally across every corner of the room, it gives unease to the room, for the structural lines go

at right angles and the furniture cuts off corners at queer angles. There is no rest in such an angled room.

When curtains end at one line below the window pane, when hangings or draperies end at another, and the window shades cut off the window at still another height, there is no rest at the windows.

When all the chairs are strung out singly and left without friendly lamps or tables, there is small comfort. Who wants to do nothing but sit?

Comfort is attained by arranging furniture in units.

The Living Room

Every well-planned living room has its furniture grouped in units. There is a conversational unit, including the sofa or davenport and one or two chairs. There is a reading unit — a large, comfortable chair, a reading lamp that gives adequate light, a small table to hold the extra book, or magazine, or ash tray. There is a writing unit — desk, comfortable desk chair, adequate light. Many women add a sewing unit where a low chair, sewing stand, and good light are grouped.

When chairs are too deep, too high, too low, when they have backs which curve in such a way that the curve of the human back does not fit, when they are too frail for any but the thinnest of girls, when they are so antique that Mother hates to have any one sit on them, they make for a lack of comfort in the home.

The radio should be close to the chair of the person who usually takes charge of the programs. Chairs should be placed out of drafts in the winter time.

There should be good traffic arrangements. If tables, or chairs, or lamps are placed where people bump their shins or trip over them, then the furniture needs to be rearranged. A table in the center of the room may interfere seriously with traffic and may make the room appear much smaller than it really is. A few years ago a center table was always used. Then it became strictly taboo. Now it is creeping back in, in large rooms at least.

If table games are played frequently in the home, it is wise to arrange a good-looking small table and comfortable chairs so they become a permanent part of the room furnishing. Then you don't have to disarrange the whole room to pull out the table.

Fashions in pictures change somewhat as the years go by, but good arrangement remains permanently with us. Pictures should be hung so that the center of interest is on the level of the eye of the average person. Pictures may be hung in groups, or paired, but not arranged in step fashion. Pictures may be hung with no cord or wire showing, or hung with two cords extending in parallel lines from the picture molding or cornice. When the picture is square, round, or rectangular, as it usually is, there is a false note introduced by having the wires form two sides of a triangle, with the picture for the third.

Fashions in furniture change, of course, but not so often as fashions in color and furniture coverings. (Pages 632–635.)

There is nothing so magical in its effects as color. A room may be lifeless, uninteresting, and then, by the addition of a pillow or two in just the right color, by the slip covering of a piece of furniture, by the relacquering of a picture frame, the room may spring to life. It's as simple as that, and as magical.

You have had many discussions on color in the art classes. Suppose we review a few principles briefly.

Colors have a language. Red is brilliant, life-giving, but used incorrectly it is aggressive and irritating. Yellow is light-giving, signifying cheer, life, and happiness. Blue is formal and dignified, cool and peaceful. Orange signifies light and heat, or a combination of the language of red and yellow. Green typifies coolness and light, a combination of yellow and blue. Violet or purple is mystery since it combines qualities of heat and cold, or red and blue.

In planning a color scheme for a room consider, first, the house as a whole. You do not want abrupt changes as you step from room to room. On the other hand, you do not want a monotonous repetition. One room may have cream, crimson, and federal-blue coloring. Another may have cream and federal-blue with accents of crimson: same color scheme but different amounts of color. In small homes, or in rooms that open into one another,

a more restful and spacious effect is gained if one color, possibly in different degrees of intensity, is used as a foundation.

It is wise to talk with the art teacher, your own home economics teacher, or an artist friend and ask one of them to help you pick out a piece of textile or pottery or picture that not only pleases you but satisfies their trained artistic sense. Then plan your color scheme, using the same key colors found in the design.

A large poster with orange, dull purple, green-blue, and much grayish-cream, makes a color scheme for a charming living room.

Old greenish-blue, crimson, putty-gray, and raisin-color are combined in a piece of chintz and repeated in a living room with delightful effect.

A well-planned room has over 50 per cent of its color scheme centered in one color with the remainders divided about 30 and 15 per cent. There is no danger of having a monotonous pink, or blue, or yellow, or green room when this rule is followed.

Nearly every room can stand some black, or white, or vivid color — not much — as accent. Vivid colors are worn as sparingly as the well-dressed woman wears jewels. Just a few but, oh! how effective.

Yellow may be used in other rooms than bedrooms if you realize that yellow includes ochers, butter yellows, mustard yellows, oranges, and saffron. You might have gray walls, printed linen curtains of gray and yellow and cream, dark mustard carpet, pure yellow in lamp shades and pillows. With this color scheme use blue-green upholstery on some of the furniture.

Never take a piece of chintz, or cretonne, or linen which combines many colors and feel that you must introduce each and every one in the room. Don't say, "This material has pink and blue, yellow and lavender in it. Therefore, I shall put into the room some pink, some blue, some yellow, and some lavender. Then I shall repeat them." Such a room looks like a poorly arranged bouquet which places the flowers in regular sequence in the bouquet. Rather choose the cream for a background, add quite a large amount of pink, a similar amount of blue or lavender, and a bit of vivid yellow for accent.

YOUR OWN ROOM

You may have all the desire in the world to do over the whole house, but, as suggested earlier, Mother and Father and the rest of the family have something to say about that. It is their home as much as it is yours.

But when it comes to your own room, that is something different. If you can work out a plan which sounds sensible and attractive, if you can show the family that it won't cost much, if you promise to keep the room in order, if you promise to stay satisfied for a while at least after the changes are made, then Mother will doubtless agree to your request. She will let you do things to your own room.

First, you need to sit down and think just what kind of a girl you are, for a well-decorated room reflects the personality of the owner.

Here are three rooms for you to study. Which one fits you? None of them exactly, let's hope. For you should be able to be a person in your own right.

The first room has soft blue walls, ceiling, and woodwork. The ivory bed has a spread of pale rose-pink organdy, made with a deep ruffle reaching to the floor. This is bound with deeper rose. The curtains are white organdy with double ruffles of two shades of rose. The small table beside the bed has a milk-glass lamp with pale pink organdy shade. The carpet is a two-toned blue one. The dressing table has a petticoat or apron of white net, very full, over cream. It is trimmed with a bow of waffled velvet blue ribbon. An easy chair is upholstered in cream-colored chintz with small blue and pink flowers scattered over it. There is a small straight chair in ivory. There are only a few pictures on the wall. One has some vivid American beauty in the coloring of the girl's shawl. The same color is repeated in a perfume bottle on the dressing table.

Here is another room. The walls are papered in a two-toned café-au-lait paper, the floor is plain dark wood, waxed and stained dark brown. Dark walnut spool bed, windsor chair, and bedside table, a hanging shelf above a desk table are the pieces of furniture in this room. The bed has a pieced quilt in a small star pat-

tern. The colors are rich red and deep blue. The rugs are braided in dark blue and old ivory. The curtains are casement length, made of unbleached muslin dyed a warm rich red. White and blue rick-rack braid trims them. The lamp is of wrought iron and has a parchment shade with a band of red on it. There is a pot of ivy growing at the window and a richly illuminated map, framed in plain dark wood, hangs on the wall.

And for the third room, walk into this one. Walls are of ivory paper flowered in small pink rosebuds. The carpet is mossy green. The bed is a spool bed in maple. The bedspread is ivory white candlewicking. There is a chest of drawers and a dressing table made with an apron of yellow and white checked gingham finished off with saucy green ball fringe. At the window are glass curtains of dotted Swiss with ruffles and ruffled tie backs. A small rocking chair has a ruffled seat cushion made of glazed chintz in a green and white pattern. The bedside table is maple. The lamp on it is pressed glass with a shade made of dotted Swiss trimmed with ball fringe.

What do you know about the girls who live in these rooms? Would n't you say that the first one belongs to Gwendolyn, the second to Judy, and the third to Dorothy? Would n't you say that Gwendolyn likes elaborate, rather fussy things? She enjoys dances and movies and reads love stories.

Judith plays tennis, reads detective stories, is a whiz at math, gets good grades in hand-craft classes, is bored with parties.

Dorothy dances, plays tennis, goes to movies, reads detective stories as well as novels, and is an all-round girl.

Is it true that we may say, "By her room ye shall know her"? Or is your room quite unlike you because you have to share it with sister, or because you have the left-over furniture from the rest of the house, or because Mother let you fix it up two or three years ago when you were a silly young thing and did n't know what you wanted? Now you are old enough to want attractive, colorful, delightful things. You have no desire to copy a movie actress's bedroom.

It is really interesting to see the way our tastes in room decoration, like our tastes in friends and books, change as we grow older. Only a young thing wants to have floppy dolls and furry kittens cluttering up the bedspread. Mirror frames which serve as holders for snap shots, dance programs, and party tallies are all right for the girl who does not mind a messy room, but as we get more sense we shift these dust-catchers to a box or drawer.

It is quite possible for a girl to dress up her room without spending much money. Here are some suggestions:

Cut off the scrolls at the top of the brass bed. Treat the metal with under coater, then enamel the brass in soft cream or pastel-colored lacquer or enamel. Make the present footboard the head. Have a low or footless bed.

Make a dressing table from a kitchen table or an orange crate, or buy an unpainted dressing table. One may be purchased for about two dollars. Enamel the table and dress it up with an apron or petticoat of chintz, calico, muslin, corduroy, or gingham.

Use unbleached muslin for curtains or bedspread, or both. Dye them the color desired, using the washing machine for the dyeing.

Use bias tape, rick-rack, or ball fringe for trimmings.

Make seat covers for chairs.

Enamel the woodwork a color to harmonize or blend with the wall paper or wall paint.

Make hooked, braided, or crocheted rugs for the floor.

Enamel the picture frames. Change the pictures in the frames, using good-looking magazine covers.

Have something growing in the room. It may be a fern, ivy, lily of the valley, or sanseveria.

Invest in an extra mirror or two. Put one where it catches the light and adds brilliance and apparent size to the room.

Try enameling a hanging shelf for the wall. Put books, plants, or pottery on it.

Get a full-length mirror to attach to closet door, either on inside or outside of the door. Use wall-paper-covered storage boxes for closet shelves. Paint the interior of clothes closet a gay color. Paint shoe trees and dress hangers.

Ask the art teacher to help you plan a color scheme, to make a lamp shade of simulated parchment paper. Your home economics teacher can help you with the dressing-table apron, curtains, rugs, and bedspread.

Here are all too usual mistakes in a room. Check up to see whether you are making these same errors:

Too much pattern — pattern in floor covering, wall paper, hangings, and upholstering.

Too many colors — no dominant color in the room to bind it together.

Too little color — room lacks character because it seems to be all cut from same piece. Examples are tan or brown rug, brown furniture, brown pictures in brown frames, tan paper, brown coverings for furniture; or taupe rug, taupe and rose furniture, tannish taupe paper, taupe, faded rose, and blue hangings.

Too much furniture — no empty or restful spaces in the room.

Too little furniture — room looks bare and unfurnished because of lack of oddments, bric-a-brac, or small articles like occasional chairs, magazine racks, book-trough tables, or hanging shelves.

Too prim an arrangement. Every piece set parallel with walls. Large pieces should always be so set but the smaller pieces should be at variance.

Too many angles in furniture arrangement — every piece is put at different angles in the room.

Too many small rugs of varying types, pattern, colors, and sizes.

Too diverse periods represented in the furnishings — a light gold chair of the French period won't hobnob with a carved Italian palace piece nor with a crudely carved shoemaker's bench or a mission table.

Too many fragile antiques.

Too few unit arrangements — looks like a procession of cats that walked by themselves.

Too little brilliance — windows too swathed and mirrors too few.

Too many, or too few, pictures of too many types hung at too diversified heights.

Too skimpy hangings, too formal hangings, too many heights and lengths of curtains in the same room.

CLASS ACTIVITIES

1. See if you can get your mother's permission to carry on a room-improvement project. Do any one or all of these things that are possible:
   - *a.* Rearrange the furniture more satisfactorily according to the principles of design
   - *b.* Choose new wall paper or wall finish if necessary and possible
   - *c.* Make new draperies, curtains, etc. for the room
   - *d.* Refinish old furniture
   - *e.* Refinish the floor

2. Make a plan for the improvement of the girls' or teachers' rest room. Carry out your plan as a class project.

3. Make a drawing to scale of the floor plans of your living room and your bedroom. Show arrangement of furniture. This may be done by using small squares or oblongs of paper representing furniture made to scale and pasted in place. Or drawings may show arrangement.

4. Criticize the arrangement of furniture in these rooms. If you were given the privilege of rearranging these rooms, could you improve the arrangement?

5. Visit homes in the community to see good arrangement of furniture.

6. Perhaps the local furniture dealer will permit the class to arrange a window as a room.

7. Find examples in magazines of furniture which is good in line and design. Be able to tell the class why you consider these examples good.

8. Bring to the class pictures of furniture poor in design. Be prepared to explain why these designs are not good.

9. Find illustrations of period furniture. Try to identify the period.

10. Visit stores to see types of furniture, rugs, draperies, etc. which would be suitable for the various rooms of the house.

11. Visit a furniture factory. If this is not possible, have the local furniture dealer tell you what to look for in the construction

of good furniture. Make special reports on this subject, using the government bulletin on furniture.

12. Choose, from the furniture listed below, two interesting groups of furniture for a living room. State the purpose of the group.

a. Desk	*f.* Straight chair
b. Lounging chair	*g.* End table
c. Bookcase	*h.* Magazine holder
d. Reading lamp	*i.* Davenport
e. Bridge table	*j.* Waste basket

13. Try the effect of various types of curtains in the schoolroom or rest room. Decide on suitable fabrics, the plan of making the curtains, and the hanging of curtains, considering the principles of line and design.

14. Arrange vases, pictures, and people against a conspicuous background, and then against a neutral one. State a general rule that might be formulated as a result of this experiment.

15. Home project (suggested):

Rearrangement of the furniture in your own living room or bedroom. Making of new curtains, draperies, lamp shades, rugs (rag or hooked), bedspread, or quilt for one of these rooms.

TEST: Your Knowledge of the Arrangement of Furniture

Directions: Choose from the phrases given below those completing the statement correctly. Write your answers on a sheet of paper.

1. The following pieces of furniture should be placed parallel with the walls of the living-room:

a. the piano (upright)
b. a small end table
c. the davenport
d. a lounging chair
e. a footstool
f. reading lamp
g. a library table

2. Formal balance in a living room may be shown by
   a. chairs placed on either side of a window and equidistant from it
   b. a grouping of a desk, a chair, and a waste basket
   c. candlesticks used on a mantle equidistant from a clock or vase as a center of interest
   d. a grouping of a reading lamp, a few books and magazines, and a bowl of flowers on a living-room table
3. Furniture placed across corners makes a room look
   a. larger
   b. smaller
   c. the same size
4. Accessories arranged in formal balance give
   a. an air of dignity and order
   b. a sense of ease and grace
   c. a feeling of restlessness
5. A room is most pleasing
   a. when either formal or informal balance is used in the arrangement of furniture
   b. when both formal and informal balance is used in the arrangement of furniture
6. The use of many small, unrelated objects on the walls or floors of a room gives a
   a. restless atmosphere
   b. cheerful atmosphere
   c. homey atmosphere
7. Massive pieces of furniture
   a. should be used in a small hall
   b. should not be used in a small hall
   c. should be selected only if one's income is large
8. Unsuccessful rooms may be blamed on
   a. too much unification of color, line, and texture, producing monotony
   b. too much variety, with a hodge-podge of unrelated parts
   c. several kinds of furniture in the room
   d. furniture arranged too informally
   e. too small an amount of money available

UNIT 3. THE HOUSE OF YOUR HEART'S DESIRE

Modern homes, such as were shown at the Chicago, San Francisco, and New York World Fairs, had been built here and there in the United States previous to 1933. These new houses did two things: they used old materials in a new way, used synthetic materials made from stone, wood, and wood fiber. Many utilized steel frames and exteriors of enamel baked on metal foundations.

The most extreme house of all in Chicago, called "The House of Tomorrow", was octagonal in shape. Extending up through the center was a metal core. The rooms radiated from this. Walls of opaque solid material were almost eliminated. In their places were slightly bowed windows of glass which reached from floor to ceiling. A landing place for the airplane, a man's workshop on the ground floor, instead of down in the dingy basement, and a recreation roof were found in this home.

Perhaps it was the extreme lengths to which this house and the glass house in New York went that made the other modern houses seem quite tame.

All of them were functional in character. There was no downstairs furnace room because the necessity of shunting the heating plant to the basement, where its dust could be confined, was obviated by the new type of heating unit: neat, compact, good-looking, almost dirt free.

Dining rooms were omitted in most cases because the use of the room for two hours a day did not seem to justify the large amount of floor space dedicated to that one use.

Playrooms were in evidence because the shorter working day is expected to bring in more leisure time. These playrooms quite frequently became play roofs. Here children were kept from the dangerous streets, and sun baths were possible without shocking the neighbors.

Windows were placed at corners of rooms where they could catch the sun's rays from at least two angles. Dust catching and meaningless ornament excrescences were eliminated.

The age of experimentation is here. Yesterday we read of a house that revolves on an axis so that the sun always shines in any room. To-day we read of the "stream line" house which is so built that

much of the stress now carried by walls is done away with. Day after to-morrow we shall doubtless read of some other new venture.

Tradition in house design and building has been thrown overboard, temporarily at least.

The modern houses did not appear so queer when seen on the Fair grounds because they were grouped together. Had one of them been moved bodily to your street and put on that vacant lot, the chances are that all the neighbors would have decided the builder or owner was "plumb crazy." Doubtless houses of this type will be built in suburban real estate developments. Whether they will replace the accepted and time-honored domestic architecture is a guess, and your guess is as good as mine.

Planning the House

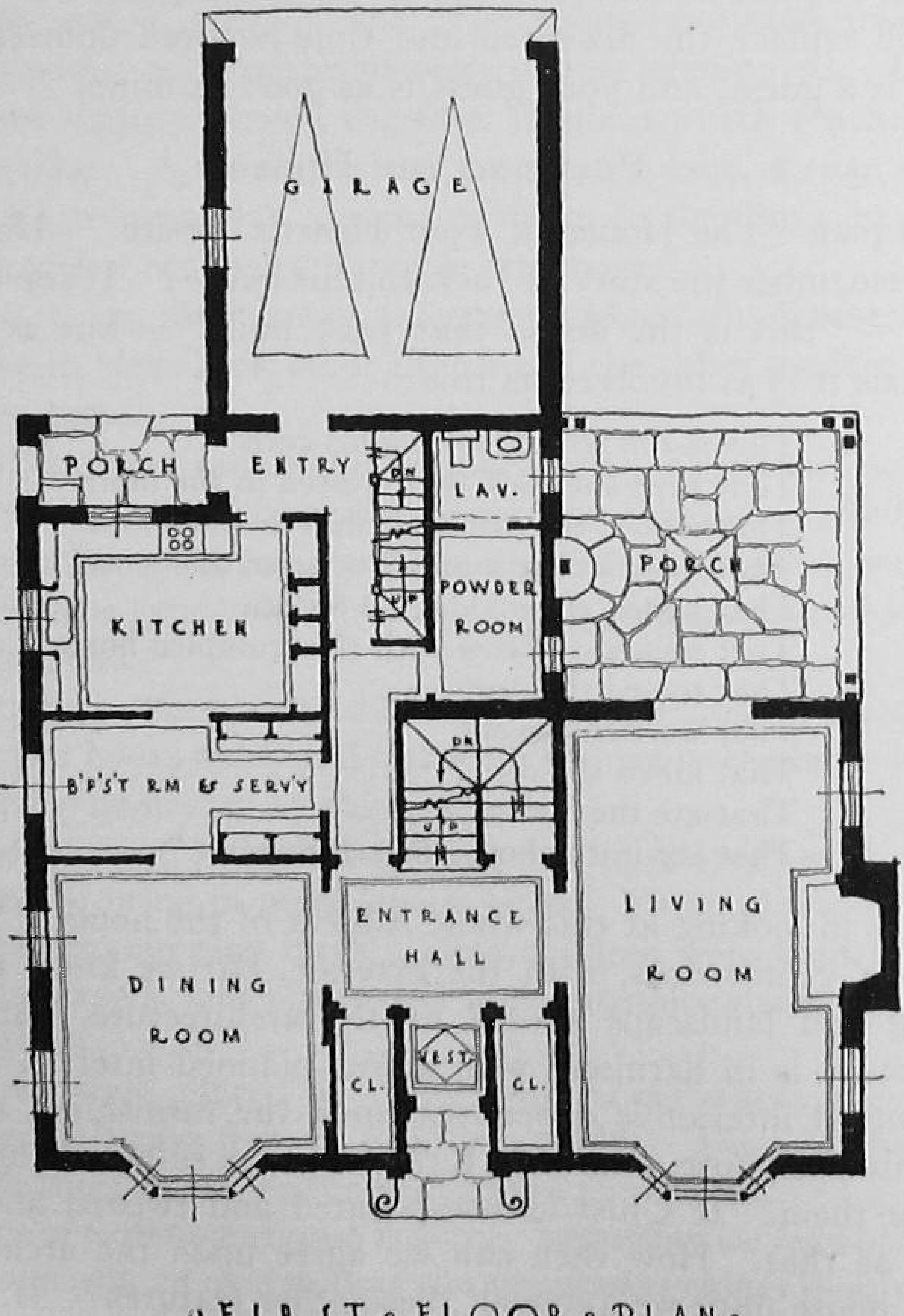
Let's plan "The House of Your Heart's Desire." How many of you remember the story of Jack and his house? It starts simply enough — "this is the house that Jack built" — but at the end of the tale it is as involved as this:

"This is the farmer sowing his corn
That kept the cock that crowed in the morn
That waked the priest all shaven and shorn
That married the man all tattered and torn
That kissed the maiden all forlorn
That milked the cow with the crumpled horn
That tossed the dog
That worried the cat
That killed the rat
That ate the malt
That lay in the house that Jack built."

So it is in looking at this whole subject of the home. We may start as a visitor does, with the exterior, but we know that the planting and landscape should fit the architecture. And good architecture is in harmony with a well-planned interior, and the well-planned interior is dependent upon the furnishings that are going into the house, and these furnishings are suited to the people who use them. It's just as complicated and twisted and interrelated as that. How then can we agree upon the architecture for any house until we know all these other features? If there is an answer to that question, the author does n't know it.

Suppose we get at it in this way: imagine getting ready to build and saying, "Well, in this new home, 'The House of My Heart's Desire', I should like these things:

"I want a ceiling light that will shine down upon the stranger who is at the door. I want some sort of protection, it may be porch, portico, or hooded-space over the front door, so that the incoming guest is sheltered while he waits on the step for an answer to his knock. I want a squint or enough glass in the front door so that I can identify the visitor before I open the door.



FIRST · FLOOR · PLAN

Drawing by Bloodgood Tuttle, A. I. A.

"I want an entrance hall that is quite formal. I want a floor in the entrance hall that will not be spotted by rain, snow, or mud which may be on the visitor's feet. I want the entrance hall small enough to preclude long visiting, but I want it gracious and courteous.

"Opening from this hall I want at least one guest closet. It may be a small dressing room with a lavatory in a separate niche. It should have a mirror, dressing table or shelf, hooks and hangers for wraps, adequate light. This may be done in a modern "smart" style or in an amusing fashion — say mid-Victorian. I plan to call this room a "powder room." There should be another closet on the other side of the hall used for men's wraps.

"I want the living room to be longer than it is wide. It should have wide windows, possibly deep window seats. I should like to have an open fireplace for logs or coal in it. It should have adequate wall space for pieces of furniture and a place for books.

"I should like a bay in the dining room, a large sunny bay in which a breakfast table may be placed. I should like this room to have unbroken wall spaces, side lights, and many electrical outlets

"Or, if I can't have a bay in the dining room, I should like a breakfast room, cheerful and sunny.

"I should like a door, possibly a swinging one, between the kitchen and the breakfast room.

"I should like a library, wood-paneled, quiet, rich, with a wood-burning fireplace in it.

"I want my kitchen to be a rectangle rather than a square. It must have good light, both natural and artificial.

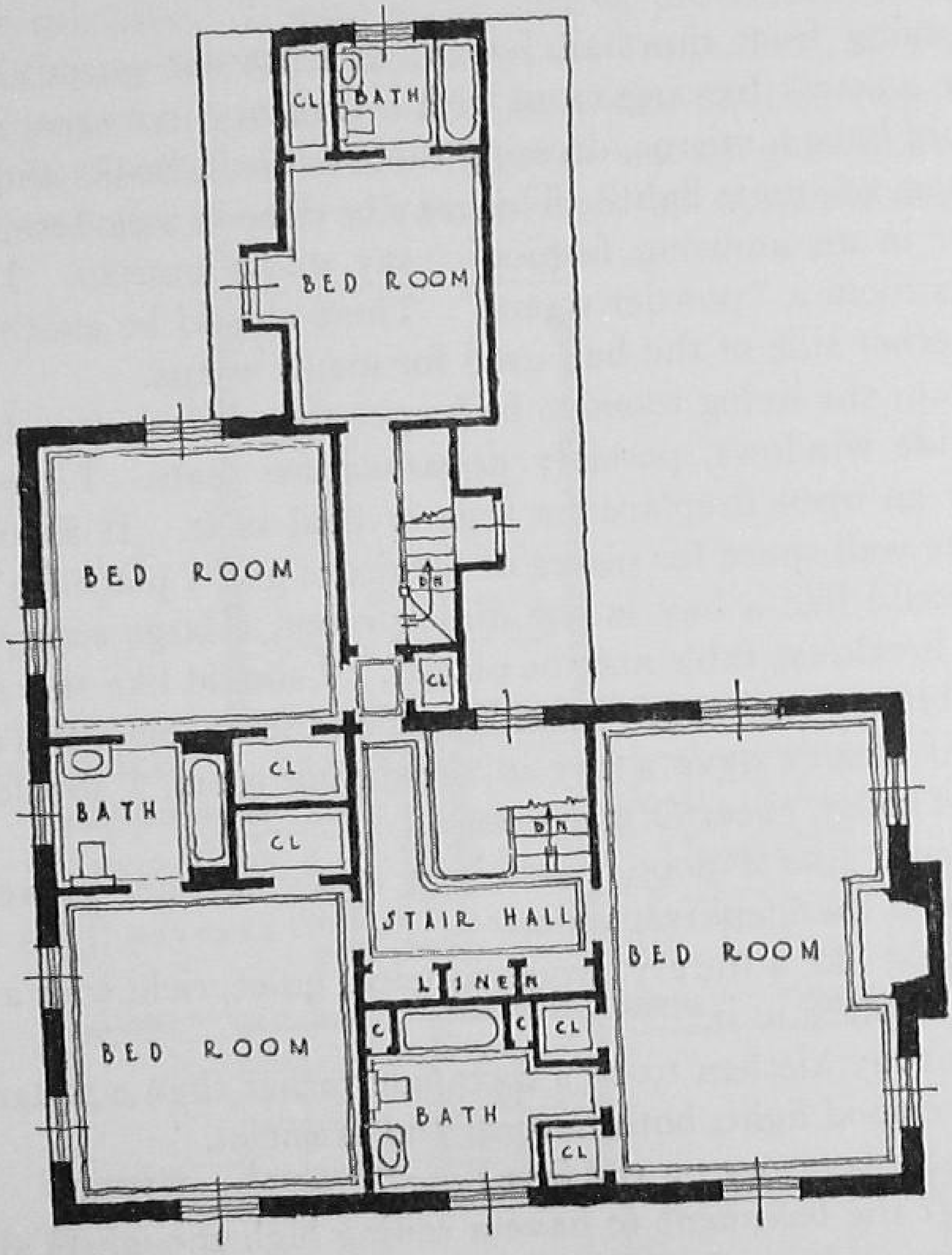
"I want a lavatory on the first floor.

"I want the basement to have a ceiling high enough to allow a tall man to walk without bumping his head on it. I want head room for all heating pipes. For this room I also want electrical connections for a washing machine and mangle; walls that do not shed whitewash nor acquire mildew; cement floors with drains, or floors covered with asphalt tile; and cross ventilation.

"I want the stairway leading to the basement to be straight, with a handrail on each side.

"I want all the stair risers of easy height, and the treads wide enough for feet to step upon comfortably.

"I should like two bathrooms upstairs. In each I want at least one window, a built-in tub, shower, shelf space for towels, medicine cabinet, adequate light. I think I want the basic color white — then I can add accents of color.



•SECOND•FLOOR•PLAN•

Drawing by Bloodgood Tuttle, A.I.A.

"I want each bedroom to have cross ventilation; windows placed so that the light does not shine in the sleepers' eyes; enough unbroken wall space to place furniture sensibly; and an open fireplace in at least one bedroom. I want each room to open on to a hall independent of any other room.

"I want an airing porch, which may also be a sleeping porch, upstairs and a porch downstairs which is screened-in and furnished with electrical outlets."

As you were detailing your wants, you put all the storage needs of your family in a list:

Closet for guests' wraps. This removes the necessity for taking them upstairs to put the wraps on a bed.

Closet for storage of family wraps. There should be a row of hooks hung low, if there are small members in the family. There should be some sort of storage space for galoshes, rubbers, boots, skates, both ice and roller.

Storage space for wood to be burned in the fireplace. A dumb-waiter arrangement which allows the wood to be sent up from the basement may be planned and put in easily.

Storage space for folding card tables. They can be filed on end, as papers are filed in cases.

Storage space for table linens, silver, flower vases, and holders; for cleaning equipment; for pots and pans, company dishes, kitchen utensils; for kitchen towels and cloths; for household linens (the linens may go on shelves which slide in and out, or in drawers or on sliding trays); for medicines and first-aid supplies; for clothes in closets adjoining each bedroom; for out-of-season clothes; for blankets and comforters; for trunks and bags.

Your wants are nearly all catalogued now! You are almost ready to talk to the architect.

You have a list of questions which deal with modern building and you do not feel competent to answer them alone. You want the architect's help on such questions as:

Do you want an absence of wood trim around doors and windows? The modern method makes the openings flush with the walls. What is gained? What is lost?

You want information regarding the wall coverings you plan to use. Will you use wall paper, flexible wood fiber backed with canvas, modern wood fiber treated in modern methods, textiles treated to look like wall paper, or some of the new cellophane products? Should you plan to apply the wall covering in horizontal bands with strips of metal covering the joinings? Should you plan on paneling any of the rooms?

Do you want to use cornices at the windows? Should you consider Venetian blinds, textile window shades, outside awnings of slatted woods, or awnings of cloth?

What about concealed radiation?

You are expecting to have a built-in niche for the range. Should the ventilating fan be in the kitchen or in that niche? Do you want a built-in ironing board in the kitchen? Should you want a sink which is an electric dishwasher as well? Should you have a built-in planning desk in the kitchen?

And now, at last, you approach the architect. You have with you the list of rooms required; the preference as to location of these rooms in the house; the list of storage spaces; the list of needs peculiar to the family — such as extra rooms for books; a hobby room for husband's own use; a sewing room; a flower room where the flowers are arranged; a dark room for developing photographs.

You also have with you a list of what you consider necessities — open fireplaces; cross ventilation; quiet bedrooms; easy-tread stairs; privacy.

You have your list of questions.

You may give the architect photographs, or book or magazine illustrations of the kind of house you hope to have.

You tell the architect the amount of money you have to spend.

Supplied with all this information, the architect sets to work. In drawing up the preliminary sketch he gives you a general picture of the house-to-be; the house of your heart's desire.

There is small doubt that you have asked more for your money and more for your house than he can give you. The architect is not going to let you build a Spanish patio type of house when all the rest of the houses in the neighborhood are Cape Cod. Nor will he give you a Colonial house of the Virginian type if the lot is narrow and deep and the neighbors have built houses with dormer windows and steeply pitched roofs. He will not allow you to combine the turret you liked on a French Norman house with the wide verandah of a Kentucky mansion or the rounded roof of an English cottage with the half-timbered wall of Elizabethan English.

A good architect plans a house that has a silhouette fitting the surroundings; that has a plan conforming to the outward form of the house; that is well proportioned, so that one part or one piece is not out of harmony with the others; that is consistent in its exterior detail and charming in its interior detail; that is

pleasing in color and texture; and that, most of all, has the individuality of the owner expressed. "He who hath builded the house hath more honor than the house." This is just another way of saying that the individual is of more importance than his trappings. When I wear a new dress and every one says, "Oh, what a pretty dress you have," that person is not complimenting me, she is saying, in effect, "Your dress dominates you." When people say, "My, what a grand house you have," they are not complimenting you. They are saying in effect, "Your house dominates you." They should say, "When I came up the street and looked at the houses, I picked this one out as yours because it has the look of you, some way."

After all, a person should be more important than his surroundings, trappings, and possessions.

CLASS ACTIVITIES

1. Draw from actual measurements the plans of the house in which you live. List the good and bad points of this plan.

2. Choose from illustrations in magazines or books the plans of a house which you would consider ideal for your family. List the reasons you consider this house suitable.

3. Bring to class an illustration of the plans of a house to meet the needs of some family you know. Tell the class how this plan meets the needs of the family, their standard of living, and the lot where the house will be built.

4. Your family is renting a house. Describe the house you think they should look for, considering the rent they can pay and the conveniences they consider essential.

5. A young couple you know is looking for a three-room apartment. Find the plans of one you think would be suitable. The rent must be reasonable, as the young man is making $20 per week. (In your community they may have to consider a part of a house. Do you know of any suitable places?)

6. Make a list of the things you want in your ideal house, considering the possibility that some day you may have a chance to build such a home. Find a plan which meets as many of these wants as possible.

Furnishing the House of Your Heart's Desire

When you look over your home, you find things that are not satisfactory. Mother is the first one to agree with you. You complain that the dish towels leave lint on the glassware. Mother says, "Yes, I know. I bought those towels at a bargain sale and I am sorry I did. They were no bargain." Or you try to cut bread with a knife which won't keep a cutting edge. Mother says, "That knife is one I bought in a hurry. I 'll never do that again. It pays to take your time in selecting things you buy."

Mother has stated two truths — one, that a bargain is frequently anything but a bargain; the other, that hasty buying means lengthy repenting.

Suppose you were going to start furnishing the house of your heart's desire to-morrow. What do you know about buying practices, standards, qualities, amounts, brands, and prices?

It is n't so hard to pretend you will soon be furnishing that house as it is to pretend you can ever know everything you should know about purchasing. A woman would need the wisdom of Solomon and all his wives if she were to be a really intelligent purchaser because there is such a diversity of articles to be purchased; there are so many new ones coming on the market; the articles which are necessary in one home are superfluous in another; standards are still unformulated; and brand names tell almost as little as do labels.

But you have one advantage over Mother. When you get ready to do your home furnishing, you may call upon many sources for up-to-date, reliable information. They have come into being since she furnished her home.

Many magazines put a seal on approved goods. Trade associations, institutions, better-business bureaus, governmental bureaus, The American Home Economics Association, mail-order houses, large department stores, non-profit-making testing bureaus have reliable information which is usually at the service of the purchaser. Let some of these guide your buying rather than the purchases of Mrs. Jones across the street.

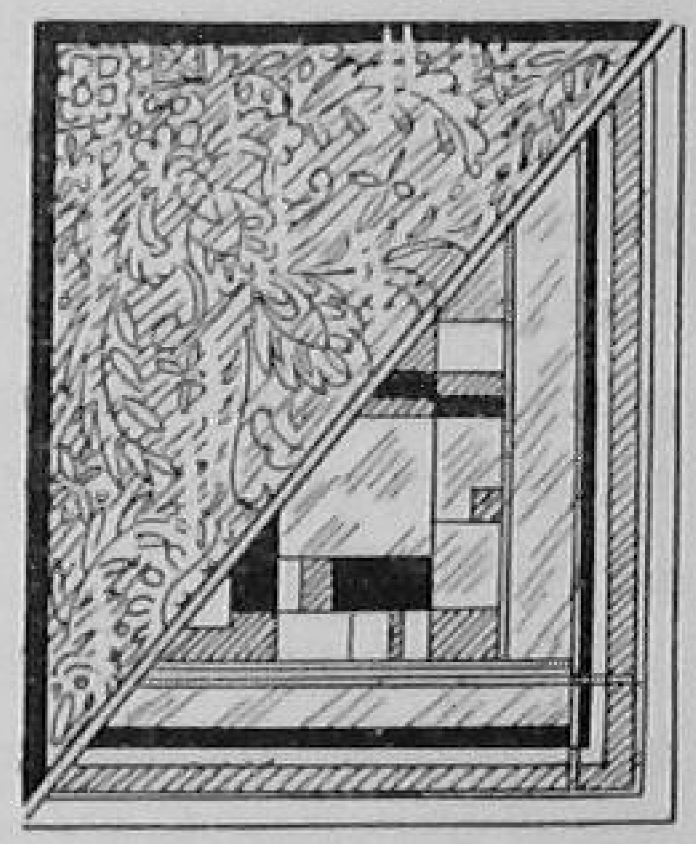
Even all this information, valuable as it is, will not help you decide what best meets your need. Canned milk, oleomargarine,

American-made oriental rugs, cross-stitch embroidery made in China may be exactly what you can best use in your home. In the past these have been looked upon as inferior substitutes, but now we are accepting them as of genuine worth.

Modern Modes in Floor Covering

Have you ever gone into one of those "Funny Houses" at an amusement park? Remember the sensation when the floor rocked or when a floor board rose up to frighten you? Have you ever walked into houses where the same thing seemed to be happening?

A floor covering should "stay put" and be humble under foot, but when the pattern is too large, too noisy, or too light the opposite happens.



There are different types of coverings, naturally, for different rooms. In a kitchen we want a covering which is not slippery, is easy to clean, resilient under foot. We want, or should want, it to be decorative.

Linoleums, either printed or inlaid, are satisfactory for kitchens. Embossed linoleum is decorative but a bit difficult in a kitchen, for food will get spilled and will settle in the depressions.

Rubber tiling, for home kitchens, is rather new but seems to be making a good name for itself. Cleaning it with weak ammonia water or mild soapsuds is recommended.

Plain wood flooring is difficult, for grease will get spilt and wood will absorb it even though the wood be kept oiled. But wood floors are as easy on the feet as cleaning them is hard on the home-maker.

Tile is used on some hotel kitchen floors, but chefs find it hard on the feet. The fact that the tile may be laid in cement and be vermin-proof and almost grease-impervious are arguments in its favor.

Rubber tile, clay tile, and linoleum may be laid with a cove or rounded base. This makes cleaning an easier task.

Basement floors may be of concrete. Liquid applications which make it dust free may be put upon concrete. If a basement floor

gets damp, it must be tiled with asphalt tile, which is the only moisture-proof covering. Linoleum rots if laid on a damp basement floor. Asphalt tile is the answer for basements.

Rugs are of almost as many types as there are materials. Cocoa fiber, rubber link, or metal links are suitable for out-of-door use. Matting, reed, and other grass materials are used on porches, summer-cottage floors, and bedrooms.

Home-made rugs are varied. Hooked rugs are made of wool, cotton, rayon, silk, or yarn. Silk is not able to withstand the grinding pressure of sharp spike heels.

Braided rugs use silk, wool, cotton, grasses, and synthetic fibers.

Crocheted rugs use cotton, wool, linen, silk in both strips and yarns.

Quaint rugs may be made of pieces of felt applied as buttons, petals, penwiper bunch effects, and so on.

Animal pelts in both natural and dyed colors are "smart" just now.

Matted felt rugs with a chainstitch embroidered pattern and a ragged fringe come from India. They are known as Numdah. They are not built to withstand the vacuum cleaners and the sharp-heeled shoes of the Occident.

Carpets are nothing more than hooked rugs grown large. The same idea of pulling yarns through a burlap foundation of some sort is used. In the Orient, where patience and time go hand in hand, we have the marvelous hand-knotted rugs which may represent a lifetime of labor. And in the Occident, where we do things in a hurry, we have miles of carpet made per day on machine looms.

There are many varieties of carpeting — Wilton, Brussels, velvet, Axminster, chenille, and, of late, broadloom.

These new carpets, the broadlooms, are designed to carpet a room with nary a seam in the lot. The material comes as wide as eighteen feet. The colors are many. It is possible to insert stylized patterns in the material, just as is done in stylized linoleums.

Carpeting, which comes in narrower widths but is put together with a rubber tape so that, to all intents and purposes, no seams are visible, is on the market also.

For bathrooms there are chenille, terry, sponge-rubber rugs, as well as all types of hooked, braided, and crocheted ones.

In speaking of the Oriental rugs we mentioned only one variety by name — Numdah. That is not a typical Oriental, for it does not have the hundreds and thousands of hand-tied knots which hold the soft-colored yarns in intricate patterns. In the true Orientals we have the Persian, which are by far the most beautiful. Then we have the Daghestan, Turkish, Caucasian, Baluchistan, Indian, and Chinese. The last named has a thick velvety pile, a high luscer, and a type of pattern quite different from that of the intricate, legend-significant ones of other parts of the East.

The true American rug is the Indian one with its flat surface weave and its characteristic Indian symbols worked out on gray backgrounds in tones of red, brown, and black and white.

We have an American version of the Oriental. The patterns are copies, but the carpets are machine loomed. All too frequently the yarns have been washed with acids to give a high luster and sheen. This high lighting is much more insistent than the softer kind which comes in the true Oriental rug only when the light is shining right into the pile.

The Wilton, Brussels, Axminster, velvet, and chenille are of European ancestry. They are quite different from the Oriental rugs.

There are two general types — the uncut-loop variety and the cut, or pile, variety.

In the first class we have the Brussels. The yarn used in these is usually a hard, twisted kind. When the colors are dyed in the strands of yarn in the skein, the carpet is known as tapestry Brussels. This is not so good as the body Brussels.

When the loops are cut, we have Wilton carpets. There are a number of qualities of this carpet, depending on the yarn and the color printing. The loops are loomed in and then sliced, or cut, along the top by a sharp wire-like knife.

A velvet rug has a cut pile with a fuzzy texture. The loops are not put so close together as the ones in a Wilton, but they are closer than the loops in the Axminster. A soft yarn, which is fluffed easily, is used in making the velvet carpeting. This comes only in plain colors.

One other European kind of carpet is used both here and abroad — the ingrain. It is a flat weave, no pile, no loops, cut or uncut.

In something of the same weave but of a different texture is the so-called rag carpeting, usually woven in hit-or-miss pattern. It is made with strips of rags of all colors and lengths — hence the "hit or miss-ness" of it.

At present there is a great vogue for carpets in the off-white shades. These are made with geometrical designs of cut and uncut loops. A diamond of uncut loops may remain upstanding on the background of cut pile. "Sculptured" is the name and the effect. They are in keeping with the present tendency to get results from monotones woven to give varied textures and thereby enhance the interest of the fabric. This is being done with wall hangings and draperies as well.

Modern Modes in Hangings

A few years ago a prominent manufacturer of curtain materials was asked to participate in an exhibit of home furnishings. His company makes hundreds upon hundreds of patterns. He declined, "Because," he said, "if we put hangings in that exhibition house and do a good job, no one will notice them, for they will be part of a pleasing picture. Only longer scrutiny than your casual visitors will give can do us any good. Then, too, when we make hundreds of patterns, why limit us to one, which will be so well chosen no one sees it. I 'm sorry, but that does not seem a wise way for us to spend our money." To his statements there was no argument.

In a room well-curtained you are no more conscious of curtains than you are of anything else in the room. When the curtains are conspicuous, there is something the matter with them. They may be too rich, too cheap, too skimpy, too voluminous, too short, too noisy, too long. But rest assured there is a "too" something the matter with them. Yet it is hard to find anything that adds more to a room than curtains well chosen.

Curtains do not exist to shut off a view. They are supposed to soften and frame an outlook. They may be used to shut out too strong a sunlight on occasions, but primarily their purpose is soft framing.

Almost any material, from cheesecloth to embossed velvet, may be used for curtains. Silk, satin, and velvet seem fitted to the

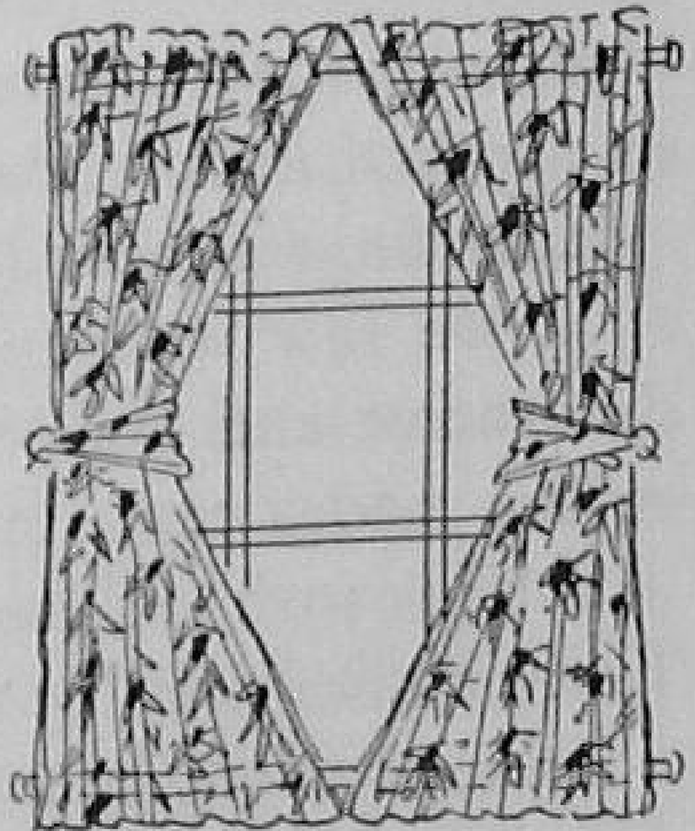
really "elegant" home. They belong in homes where butlers say, "Dinner is served, Madame," and where you, as mistress, come down the stairs a picture to delight in your velvet-trained hostess gown.

Most of our homes need materials like linens, chintzes, or cretonnes for curtains. These are in good taste in living room, dining room, or bedroom. One stately living room used heavy old damask tablecloths turned creamy-white with age for hangings and they seemed fitting. Another home used candlewicking on the bed and at the windows in a guest room. The curtains were made of one of the spreads split in two.

Organdy, dimity, theatrical gauze, and gauzes made of synthetic material belong in the lightly-veiling and framing class; monk's cloth, heavy casement cloth in the heavily-shading class.

Both cellophane strands woven with textiles, and chemically coated rubber, silk, and other fabrics are available today. These may have glitter or transparency and do add sparkle to a room.

Curtains which hang full, soft, and close to the glass are called, correctly enough, "glass curtains." They should be made of sheer material in écru or white. A leaded tape is usually run inside the bottom hem to keep them hanging well. They should come to the sill or, possibly, to the apron.



Casement curtains are made for windows which swing in or out and are worked with hinges or pivots. These curtains usually hang to the apron of the window frame. They may be made of heavy materials, handwoven wools, homespuns, monk's cloth, or regular casement cloth. As a rule they are free from pattern, at least any decided one, for, being short, they would look "bobby" if heavily figured.

Draperies which reach to within an inch of the floor, to the floor, or sweep on the floor for about two inches are frequently called, even by those who should know better, "drapes."

Fast dyes add sparkle and color durability to unlined glazed chintzes and cretonnes. Light shining through makes them glow. The unevenness and opacity of fiber detracts from the pattern of

linen hangings left unlined. Linens, damasks, and velours should be interlined before the cream sateen lining is put in place.

The top of a curtain may be nothing more than a casing through which the rod runs. From this we graduate to a casing and heading. Then, more elaborate, is the French pleated heading. This heading may conceal the hooks which hang on the rod, or to the headings' very top may be sewed the rings which slip over the wooden or glass poles.

The top of the hangings may be concealed entirely with a valance of the curtain material, or it may be a box-like affair of mirror glass, painted wood, or wood covered with curtain fabric. This is called a cornice. Cornices add to the dignity of a room and detract from too great height in windows or ceiling.

A swag is a loose piece of material draped over the pole and cascading down one or both sides of the curtains. Swags are quite mid-Victorian.

The selvedge of all thin materials is cut off before hems or seams are made. In heavy materials, or those which fray easily, such as theatrical gauze, selvedges may be snipped at intervals. Bottom hems in most curtains are three inches deep. Front side hems are at least an inch wide. Those at the back may be as small as one-half inch. (Pages 638–639.)

Edge finishes may be ball fringe, tied fringe, or brush fringe. In 1935 we saw wooden beads, glass-bead fringe, and other highly decorative and elaborate finishes used. These went out as more severe modes came in.

Ruffles with self-heading or corded heading are used frequently. These ruffles may be finished with a machine-picoted edge.

Two, or even three, ruffles of varying widths and different colors may be used on the sides and bottom of curtains.

Bias tape is a good finish for many tailored curtains. For a bathroom it is possible to have heavy bath toweling hanging full and straight. The color needed may be introduced by stitching gay-colored bias tape down the hem along the bottom and front hem.

Rick-rack braid is another finish which goes well on informal curtains.

Curtains may be held back or draped by bands or tie-backs —

plain, shaped, or ruffled. Ruffled tie-backs are in keeping when the curtains themselves are finished that way. Picoted strips of bright organdy, nine inches wide and seventy-two inches long, may hold curtains back. Tie organdy in large bow.

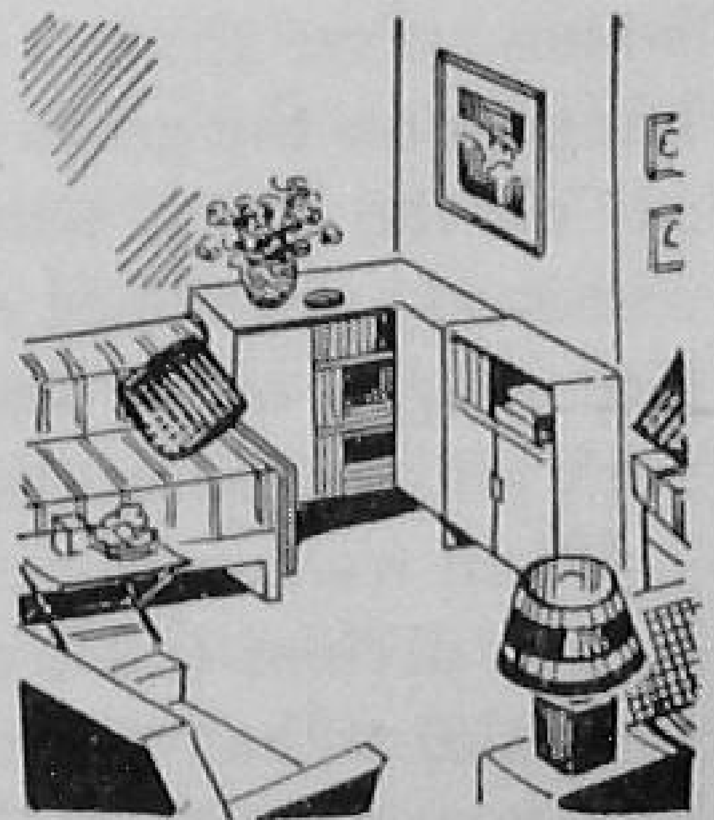
Curtain hold-backs are made of many materials — china, glass, brass, painted tin, painted or stained wood. A screw four to five inches long and one-quarter inch in diameter, is topped with an ornamental knob or arm of some sort. The screw is worked into the window casing for a distance of about one-half inch and then the folds of curtain are inserted between the projecting length of screw and the knob. The knob keeps the material from slipping back down into straight lines.

In choosing curtain material try a length of it at home at the window. Consider it in both day and night light. Remember that a dark house next door, when close to the windows, may change the effect of the material.

Curtains may be sprightly, interesting, different. They may give the touch of individuality to a room. Don't be afraid to try material from the dress-goods counter for your hangings. Don't be afraid to try something different. But always bear in mind that a thing may be so different it is bizarre and queer.

And remember, too, the primary function of a curtain is to frame the window and view. It is not to detract from or obscure it.

Modern Modes in Furniture



Some day when your history class seems nothing but a jumble of dates — or perhaps history is n't taught like that any more — think of history in terms of costumes and furniture. Immediately it will become fascinating, alive, and vital.

Furniture styles have always been affected by the modes and manners of the age. The earliest furniture in England was in the form of chests. A family did not have a settled domain and habitation, but had to move on as a new conqueror advanced. Goods and chattels could be packed into chests and carried fairly easily.

When you think of the furniture of England in the sixteenth century, you visualize heavy massive pieces. In those days men wore coats of mail and dressed in armor. Fancy a man dressed like that sitting on a delicate gilded chair. You know what would happen. Crash, bang! the chair would be a ruin and the man would be on the floor. It took heavy massive pieces of oak to hold a man in those days. Then, too, the great halls were huge bare places so large that almost any furniture, even that of giant size, was swallowed up in it.

By the time Queen Elizabeth ascended the throne, English houses were built more solidly. There were fewer drafts, smaller rooms, and so the furniture became slightly less massive. Think of the pictures you have seen of Sir Walter Raleigh. See him dressed in doublet and hose, sweeping plume on his hat. Coats of mail had been discarded. Consequently, furniture could become lighter. In the days of the early English kings, both men and emotions were heavy-handed. In Sir Walter Raleigh's day there was courtliness and knightly obeisance. But even that was heavy as compared with Gallic manners. Contrast English court life with the gayety found in the French court before the Revolution. Can't you see why the French chairs of that period were slight inconsequential affairs with garlands and bowknots of ribbon woven into their tapestry and carved into the chair backs?

Let us repeat — our moods are fashioned in our furniture. So are our necessities. Wing chairs came into being because early homes were drafty. The breeze which swayed the tapestry hanging on the great wall stole around and about the person who sat on the bench toasting before the huge fire. To get comfort somebody developed a chair with high back and projecting wings, like flanges, which kept the breezes from giving one a crick in the neck and a cold in the head.

When women wore immense skirts, they could not sit with comfort in a close-sided chair. To meet that need we have the farthingale, a chair with back and seat but no confining sides at all.

A bureau used to be a desk. The word originally came from "burrus", Latin for "red." A red cloth always used to top the writing desk.

Many of our furniture terms are self-explanatory: bun foot,

spade foot, fiddle back, comb back, ribbon back, egg and dart, chair rail, apron.

History is found writing itself in the woods used by a furniture maker. Early American settlers had no mahogany, no fine-grained walnut. They had to use the woods at hand — pine, maple, cherry. They had no fine tools, no lathes for turning spindles. So we find the hand-hewn, crudely hand-shaped early American furniture. (Pages 632–635.)

In colonial days, gracious living, comfort, and wealth had come to the colonies. We find, too, beautifully turned and polished mahogany, indicative of the elegance of the day.

Provincial France could not afford the furniture of the master workmen in the ateliers of Paris. But the peasants could take beech wood, pear wood, other fruit woods close at hand and fashion them into pieces which had grace combined with quaintness. They had access to tools as our early American fathers did not; that 's why the provincial furniture of Europe is more slenderly fashioned than its contemporary furniture in America.

During the reigns of the Georges of England, life was becoming more cultured, easier, more settled. Lords inherited the land of their forefathers and added to the castles built in the reign of William and Mary and of Queen Anne.

During the Georgian period we get the four great furniture men of England — the brothers Adam, Chippendale, Hepplewhite, Sheraton. And in this country we have Duncan Phyfe.

Compare the brothers Adam with their characteristic classic coldness, Chippendale and his hearty largeness, Sheraton and his aristocracy of design, Hepplewhite and his furniture of lightness and grace, Duncan Phyfe and his honesty, restraint, and pains-taking dryness always expressed in mahogany. They all were artists with wood, putting grace, beauty, strength, and restraint of line into their handiwork.

The French Revolution brings Napoleon and his Empire in its train. We find Empire furniture with the eagles, the torch, the bees. We find contemporary Biedermeier in Germany.

And then comes Queen Victoria to the English crown.

When Queen Victoria ruled her land she did it well, but both she and the Prince Consort had execrable taste. To be beautiful

in their eyes a thing had to be trimmed with fringe and gilt and excrescences. People like Ruskin and William Morris rebelled. A rebel usually goes as far in one direction as the inciter of the rebellion has gone the other way. So we get the plainness of the Morris chair.

After the World War, when social amenities went by the board; when grace, and courtesy, and gentleness were put away; when ruthlessness, and stark honesty, and realism took their place, we developed straight-line furniture: boxy, heavy, cumbersome. We wore straight-line clothes and boasted of the "boyish figure." Not a curve in a crowd was allowed.

But slowly the amenities are creeping back. We are developing furniture of the twentieth century. It has the simple curves of the best of the French Empire and the English Regency period. Curves are coming back, graciousness is returning, so is the age of elegance with its regal velvets, its sweeping trains, and plumed hats. And as always, our furniture keeps pace.

It 's a fascinating story — this relation of furniture to the modes and manners and the history of the times.

In addition to choosing furniture which expresses the modes or manners you are putting into the "house of your heart's desire" you need to purchase furniture which is well constructed. How can you tell? Buying upholstered furniture is almost as uncertain as "buying a pig in a poke." The outside can hide so many interior defects.

But the outside is somewhat self-revelatory, even so. A shiny finish is apt to cover a shoddy interior.

Too many curves, excrescences, carving, lacking clean-cut lines, may hide too few inner strengths.

Try the drawers. Do they slide out easily, noiselessly? Are there center slides fastened to the outside bottom piece? Does the drawer go back in easily? Is there a dust frame back of the drawer? Look for corner blocks. Are they there? Are they both screwed in and glued on?

Are double-grooved dowels used or is the frame held together with nails?

Is a cheap loosely-woven cloth stretched over the bottom of the upholstery or can you see strong bands of webbing crossed and intercrossed, making almost a complete web?

The above are tests of well-constructed furniture.

You may have to take the salesperson's word as to the inner filling. It varies from cotton, excelsior, straw, paper, up through Spanish moss, kapok, palm fiber, curled horsehair, to down.

Frames are made of pine, kiln dried if it is to prove satisfactory, yellow poplar, ash, and birch.

In addition to the construction you want to consider comfort — especially in the chairs. Nineteen-inches depth of seat is considered best for a person about five feet eight inches high. Test the angle of the seat and back, to see whether the front of the chair interferes with normal blood circulation, especially at the point under the knees.

Don't believe that a piece of furniture marked "solid" mahogany, or walnut, is better than a piece fronted with a good veneer.

Solid woods may warp, they may lack an interesting grain. When scratched, they are more easily repaired, for the same wood goes all the way through. But veneer when well applied stays on, gives a more interesting grain to greater expanses of wood. More than that, since it is applied usually to three- or five-ply wood, and the strains are equalized, there is less danger of warping.

Walnut, mahogany, maple, oak, birch are stand-bys for good furniture. Recently a vogue for bleaching the darker woods to honey color has swept the country. The fad is likely to be short-lived.

Harewood, zebrana, teakwood, and ebony are riding high on the mood of the mode at present.

Many upholstered pieces with a "muslin" covering are in the store. Sometimes an inconspicuous denim is used. The desired covering is chosen and put on before the piece is sent out. Frequently the denim will do for a time at least, or until the right covering is found or can be afforded.

Cotton reps and tapestries do not hold color as well as wool materials. It is wiser to pay more at the start and get a satisfactory material.

Worn coverings, wrong patterned or colored coverings, new coverings may be concealed under slip covers. Many people choose slip covers for no other reason than that they like the informal air they give a room. Slip covers are equally good in winter and in summer.

Once moths get into a piece of mohair-upholstered furniture, it is best to send it out for re-upholstering. The upholsterer will doubtless have to tear the things to pieces to get at the larvæ of the moths. They burrow deep. Home methods fail to eradicate them. Guaranteed mothproof mohair is available.

Cleaning fluids are dangerous to use, and should be taken into the home only when the fire chief of your community has certified they are not dangerous or inflammable.

Modern Modes in Household Linens

You will have to decide between color and white or ivory for your table linens. Colored damask — delicate pink, yellow, ice-blue — is the choice of some brides. You, however, may prefer to use colored linens only in the bathroom, kitchen, or for informal table use, and choose the majority of your pieces in white or ivory.

But if you always remember that quality is more desirable than quantity, and if when you make your selection you will take laundering into consideration, you cannot go wrong on filling the linen chest.

In choosing bed linen you have a choice of linen or cotton. Linen bedding is heavier than cotton, but the percale and fine muslin bedding as made to-day is exquisite and lovely.

Brides are equally divided on the subject of large tablecloths and runners or doilies. Some brides select both. Lace runners are popular because spots can be washed quickly out of lace, without having to launder the whole piece — a money-saver and a labor-saver for the young housewife. Runners or doilies are made to use on the table when it is not in use. Linen or lace runners and mats for the buffet and serving table should match those to be used on the table.

Small towels are very popular to-day and are in wide use because they are so easily laundered. Many men, however, dislike using small towels, and unless you want to hear a cry of "Give me towels!" from your bathroom, you had better buy several full-size damask or huck towels!

What to Choose First. Here is a list of linens [1] which has been found to be adequate for the bride who is providing for two beds

[1] Reprinted by permission of *Ladies' Home Journal*

and one bathroom. You can easily make additions to the list, or substitute other sizes and articles if you wish.

Table Linens

1 white damask table cloth 72″ × 126″
1 white (or ivory) damask cloth 72″ × 90″
1 dozen large napkins 24″ × 24″ or 26″ × 26″
1 dozen small napkins 16″ × 16″, 18″ × 18″, or 20″ × 20″ (luncheon size)
2 white linen or damask cloths, luncheon size
2 breakfast cloths
2 dozen small napkins — unless the 4 cloths suggested above have accompanying napkins
1 table pad to use under tablecloths
2 sets of linen doilies or mats for buffet and the serving table
1 luncheon set with oblong mats and napkins
2 tea or bridge sets
4 tray covers
1 dozen finger-bowl doilies
1 dozen tiny tea napkins

Bed Linen and Blankets

12 sheets
12 matching pillow cases
4 best quality wool blankets
2 lightweight wool-and-cotton blankets
2 comfortables
4 bedspreads
2 mattress protectors

Bathroom and Kitchen Linens

12 large bath towels
12 wash cloths to match
2 bath mats
1 dozen guest towels
2 dozen small hand towels
2 dozen dish towels
1 dozen kitchen hand towels. (Small bath towels are excellent for this purpose)
6 dish cloths
6 dust cloths

In buying bed linens, it is well to remember that for a comfortable fit on standard-size beds, the following torn sizes before

hemming are desirable. The usual length of a 108″ sheet after hemming and laundering is approximately 98″.

STANDARD SIZES (*Before Hemming*)

SHEETS

Single or Cot Beds 3 ft. wide	Single or Twin Beds 3 ft. 6 in. wide	Twin or Three-Quarter Beds	Double Beds
54 × 90	63 × 90	72 × 90	81 × 90
54 × 99	63 × 99	72 × 99	81 × 99
54 × 108	**63 × 108**	**72 × 108**	**81 × 108**
			90 × 99
			90 × 108

CRIB SHEETS

45 × 64	**45 × 72**	**45 × 75**	**50 × 72**

PILLOW CASES

Pillow	Pillow Case	Pillow	Pillow Case
20 × 26	**42 × 36**	22 × 28	**45 × 36**
	42 × 38½		**45 × 38½**
20 × 28	**42 × 40½**	22 × 30	**45 × 40½**

(A pillow given as 20 inches wide is 40 inches around and, therefore, should have a 42-inch case.)

Monograms. Elaborate monograms are a luxury and are out of place on simple linen. It is smart to select a particular type of lettering and to follow it through in marking your entire linen supply. The table linen is, of course, marked more elaborately than that used in the bedroom and the bathroom.

Large-size dinner napkins may be marked in three ways:

(*a*) At center side, facing selvage, 4″ from edge. Monogram should measure about 2½″ high

(*b*) Monogram 5½″ from corner, facing corner, measuring about 2½″ high

(*c*) Monogram, 2½″ in height, set in exact center of napkin, facing selvage

Monograms on damask napkins should never face the hem.

The small luncheon napkin usually has the monogram about 4″ from (and facing) the corner. It should measure about 1½″.

There are two ways of marking the oblong tablecloth. The more popular is called center-line marking. Imagine a straight

line drawn from the exact center of each end of the cloth toward the middle for a distance of 31″. The monogram is embroidered at this point, in this case facing the hem. This is done at both ends of the cloth so that there is a monogram showing at each end of the table when the cloth is laid. The center of the monogram should be 31″ from hem, and the monogram itself 4″, 5″, or even 6″ high.

This style marking may be used for either a tablecloth or a refectory cloth.

The second method of marking tablecloths is called "opposite-corner marking", although it is correct to mark at one corner only. Imagine a diagonal line drawn from opposite corners of the cloth at an angle of forty-five degrees. The center of each monogram will be 42″ from the corner, facing the corner, and the monogram will be 4″, 5″, or 6″ high.

For tea or bridge cloths, the center of the monogram should be about 12″ from the corner, facing corner. The size of the monogram is about 2½″ or 3″.

Guest towels are marked about 5″ from center end, facing end, and 2″ high. Hand towels (also called face or small bedroom towels) 6″ from center end, facing end. The size of the monogram is about 3″. Bath towels have the center of the monogram about 7″ from center end, and the size is 5″ to 6½″ high.

Sheets have center of monogram about 8″ from center top edge, facing the hem. Size 4″ to 6½″ high.

Pillow cases have center of monogram 6″ from center end, facing hem. Size of the monogram is 2½″ or 3″ high.[1]

Modern Modes in Mattresses and Pillows

Comfort and durability are the two desirable characteristics of modern bedding. There is nothing new or modern about that.

"Invest in Rest" is the seal of the Better Bedding Alliance of America, proving they know that relaxation is the thing purchased when buying mattresses.

That seal is not given to every manufacturer. He must prove that his mattresses are filled with new and sanitary materials.

[1] Reprinted by permission of *Ladies' Home Journal*

He can't go to the dump and gather up old mattresses, old clothes, old blankets, and then put this material into mattresses which present a fine outward appearance since he covers them with new ticking.

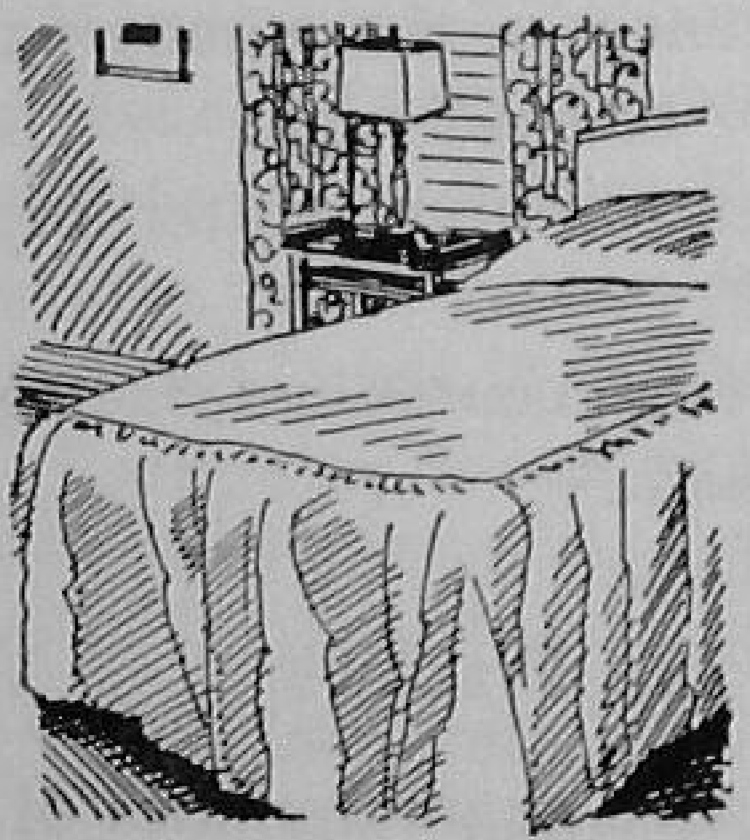
A mattress with a cheap filling may bear the seal of the Better Bedding Alliance. The man may have used kapok, a vegetable fiber, corn husks, shredded coconut husks. But at least the material was sterilized, clean and new, and was not allowed to be sold at a high fancy price.

Fillings for mattresses are compressed. They are chosen for a resiliency which will allow them to give and to conform to the shape of the sleeper's body. Any material loses resiliency in time. For that reason mattresses need renovating every so often. Fillings wear out, too. Kapok is apt to go to a powder, curled hair becomes broken.

Investigate the new mattresses filled with porous rubber.

Protect a mattress covering of ticking, cotton, or linen damask by spreading a quilted pad over it. Any material that holds human beings for six to ten hours a night needs cleaning at intervals.

Of recent years the mattress companies have lengthened the life of their product by filling the mattress casing with springs. These are then laid over, top and bottom and edges, with padding of hair or cotton felt.



These mattresses are called "inner spring." They may use individual coils, each encased in a cotton sack, or a woven equalized set of springs which are less apt to sag or bear down at any one given point.

When you buy a mattress, it is wise to choose a store you trust, to ask to see the miniature sample with one end cut in to show the construction. Try the sample with the palm of your hand pressed down heavily. Is the pressure equalized? Does the top spring back?

Pillows. Mattresses may be filled with corn husks or cotton felt or curled hair, but for resting one's head, the wise purchaser chooses down-filled pillows.

The down is that from the breast of ducks and geese.

Most of the goose feathers, and they make an excellent pillow, come from China. The dirt which comes in with the feathers is almost incredible. A shipment may lose 17 per cent of its weight after being cleaned. But if the cleaning is not well done, the feathers soon smell rancid, musty, and stale.

Duck feathers rank next as pillow filling. Down still lower are turkey and chicken feathers. These have too strong quills to be comfortable.

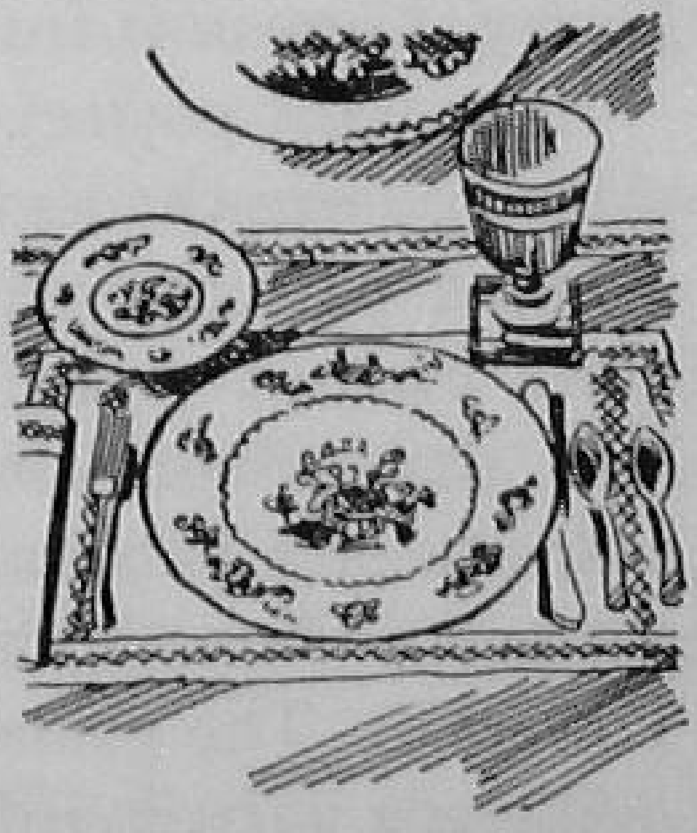
Pillows are usually sold in pairs and the weight is given in pairs. A pair of pillows measuring 21 by 27 inches, a standard size, should weigh five pounds. The coverings which hold in the filling need to be closely woven or the fine feathers and down work out. Sometimes a cheap, loosely-woven ticking is chosen. To make this seem adequate it is filled or sized with liquid chalk. If you suspect the covering is that kind, rub it vigorously between the fingers. A chalky dust is soon visible.

Sunlight is hard on pillow fillings, but circulation of air prolongs their life. So does a daily fluffing of the pillows.

Goose feathers may be prepared at home. The feathers are placed in a loosely meshed bag which is hung in a cool place for a period of a year. The seasons "cure" the feathers. They must be looked at every so often, for moths like soft downy pillows as well as you and I.

Modern Modes in China, Silver, and Glass

It is foolish to think that a few short paragraphs can deal adequately with these three products.



A beautifully set table is the dream of every girl who plans her "house of heart's desire."

Not for years past has there been such a wide variety of silver, glass, and china from which to choose. Perhaps the very multiplicity of patterns makes it difficult to choose wisely.

Sterling silver, bone china or fine porcelain, beautifully engraved or incised crystal belong on the table covered with fine damask.

Peasant pottery, silver plate, and pressed glass are at home on the table using peasant linen or handcraft luncheon sets.

A few years ago the mood of the mode was for colored glassware, colored rayon cloths, china in odd shapes and exotic designs.

The age of elegance and glamour, the middle years of the 1900's, has swung us back to fine white damask, clear crystal, dishes of accepted shape with designs as conventional as the embossed gold band.

But we have achieved something out of the unconventional mode of the past few years. We do not believe that a whole dinner needs be set forth upon china of only one pattern. The service plates, as always, are the most ornate. The salad plates may be quite different in design from the dinner plates. The dessert may appear on plates of another pattern.

Silver is back to its normal shape. The knife with the long handle and shortened blade was but a passing whimsy. So were the pieces of tableware made to look like gold knives and forks.

Good taste says choose your table appointments to fit your house. It is better to err on the side of simplicity than to fall into the error of over-decoration.

Do your adventuring with the dishes for breakfast or for informal meals where gaiety is desired.

Don't choose your dishes because the salesperson tells you "they" are using this or that. Be familiar with the names of past and present makers — Haviland from France; Meissen from Germany; Rosenthal from Bavaria; Spode, Wedgwood, Crown Derby, Lowestoft from England; American Lenox and Castleton.

In peasant pottery which has a soft underbody and a thin over glaze you can choose Quimper from Brittany or Deruta from Italy.

Some patterns come in "open stock." That does not mean quite what it says — for almost all patterns wax and wane and lose their popularity. Then they are no longer made. An example of a pattern that will never die, seemingly, is the willow pattern. One which drops out and then returns is the "Pink Towers." The gold-banded china does the same.

When a pattern is labeled "open stock", ask the dealer how long it will continue to be made. A new pattern may stay "open stock" for twenty years, but if you happen to be buying it in the

nineteenth year of its reign, you can see that the existence still left to it is brief.

Dealers are notified months before a manufacturer plans to discontinue the making of stock pattern.

In purchasing dishes consider the edge finish. Does a decided band of color come right to the edge? Then every chip will show. Is the under part of the edge protected by an extra roll?

In buying silver, glass, and china, buy for at least eight services. Since bridge is so popular it is customary to entertain two tables of four players.

But china and glass do get broken, so it is wise to buy nine of the different pieces unless you are likely to have large affairs that call for twelve. Then purchase thirteen or fourteen of each piece.

Silver is now made up and priced in sets of eight. There is less chance of loss in silver, so eight or twelve is presumably safe.

In silverware there are the accepted American makers. Their very names carry weight.

If sterling cannot be purchased, there is plated ware with a long-term guarantee. Most of the patterns in this ware are good. Then there is the plated ware with additional silver put on at the points of greatest wear.

The modern trend in table silver is toward the simple designs. Remember that silver with a high sheen and little pattern shows every scratch. Satin finish and a certain amount of pattern will stand wear-and-tear better.

In glassware avoid the shapes which have an outcurving rim. Glass chips easily. It is better to have it incurve or to have it straight.

Consider the matter of cleaning long slender glassware. Can you get the dish towel into the very bottom?

When colored glassware was riding in high favor, it was found only in the better shops. When it reached the bargain basement and dime stores, it was removed from the better shops. That did not mean that the style was poor, but that it had lost its exclusiveness.

Some of the most beautiful things are not limited or exclusive: blue skies, fleecy clouds, young leaves in spring. Don't become snobbish in your judgment, but ask yourself whether an object

is intrinsically beautiful. If so, it doesn't matter whether it is found on Fifth Avenue or in the dime store on Main Street. It is still beautiful.

Modern Modes in Lighting

When we look at the quilts which great-grandmother made, see the intricate piecing and the infinitesimal stitches, we say, "How did she ever do it? And she had nothing but candlelight in those days, too. Marvelous." It is marvelous, but it is barely possible that we are paying for some of the eyestrain of previous generations. Statistics show that seventy-one out of every hundred people over fifty years of age have defective vision, and twenty-three out of every hundred under twenty have eye difficulty of some sort.

Part of the trouble comes from the fact that we use our eyes almost continuously for rather close work: reading, studying, playing bridge, sewing, making quilts, putting jig-saw puzzles together. We are actually using our eyes 30 per cent more than the previous generation used theirs.

That being the case, we should do something about light. And we have. There is a small piece of mechanism called a "sight meter" which may be carried in the hand from room to room and used to measure the light we receive from any lamp or any illumination. We can now measure the light in any room, at any spot, and check on its adequacy.

We are changing the placement of our lighting fixtures. Chandeliers came into being when the only illumination was derived from candles. Candles were then, as now, a fire hazard. Curtains and dresses would catch fire from their flames, so up onto the ceiling the candleholders, or chandeliers, went. And there they stayed for years.

We adapted the chandelier to the electric-light bulbs. Then we remained content until some one came along and said, "We need to get away from the shadows which this light casts in the room." So indirect lighting came into being. But indirect lighting is uninteresting because, after all, one gets effect by contrasting lights and shadows.

Then decorators, lighting engineers, architects said, "Could n't

we have a combination of the two?" Now we have indirect lighting, spot lighting, cove, tubular lighting. In every case glare is eliminated and illumination is increased.

In addition to studying the charts showing the size and type of lighting used in each room of the house and the one showing wiring specification,[1] suppose we list a few general requirements as outlined by lighting authorities.

It is wise to have convenience outlets installed at a distance no further apart than twelve feet. On some walls, in the breakfast room or dining room, you may want them even closer. Twelve feet is the maximum distance between convenience outlets.

Shades should be of the reflector type in a laundry, of diffusing glass in the kitchen.

In the dining room a dome shade may be used if it is hung twenty-four inches from the table. This keeps direct, harsh light from striking guests' faces. Both wall and center lights should be in the dining room. When candles are used on the table, the overhead light is omitted.

Wall lights in any room are shaded. Shades made of textiles should be light colored with very light linings. Green, blue, and orange absorb vast quantities of light.

Shades should be open at the top unless they are used on lamps placed on low tables and used for nothing but decorative effects.

A table lamp may prove annoying because the glare from the bulb hits the person as she lifts her eyes from her book or her work. To avoid this, the proper placing of the lamp, depth and lower diameter of the shade, height of lamp base, height of table, and height of chair beside the table need to be considered.

The shade should be of a depth to hide the lamp bulbs sufficiently or should be open at the top, should have a lower diameter of eighteen to sixteen inches and an upper diameter of fourteen to twelve inches. The lining should be light, but the outer material may be of dark parchment or silk. However, green and blue should be avoided because they look so ghastly when lighted.

The ideal floor lamp is adjustable in height, has both the direct and indirect lighting units, and has a shade which is either eighteen

[1] See Appendix.

or twenty inches in diameter. The indirect lighting with its metal reflector is best filled with a 200- or 300-watt lamp.

The lighting specialist works with light as we work with any material. He mixes it, puts it behind diffusive materials, or tucks it away behind reflectors where it does the most good without being obtrusive.

Bulbs having as low a wattage as three or as high as fifty thousand may now be purchased. Tubular bulbs may be bought, even as long as thirty-four inches, and yet may be giving as low as one hundred watts of light. These are decorations rather than illuminants.

Some lighting specialists use light as an artist uses pigments: painting with the light, bringing out unsuspected beauties in a room, a piece of statuary. Others use lights to make two sides of a room bright and the other two sides dim. They use lights to color a room according to one's mood.

Lights are now made to shed health-giving rays as well as eye-saving ones. Perhaps that affects one's mood.

Modern Modes in Mirrors, Pictures, Accessories

There is more chance to smarten up a room by the judicious introduction of these three items than with anything else unless it be lamps or hangings. Mirrors, pictures, and accessories change in modishness from year to year, from season to season.

But a good picture is always a good picture. It may be reframed and still be good. There are times when there is a vogue for prints; then oil paintings seem to be the popular type. Later the water color comes into its own.

Mirrors at the present time are plain bevel-edged and unframed. But this phase will pass and we shall have the ornate gilded frames again and the subdued rich wood frames. Mirrors reflect the mood of the mode in more ways than one. Accessories may be as mid-Victorian as alabaster hands, wax flowers under glass cases, what-nots loaded with bibelots. Or they may be as smartly sleek as cylinders of chromium, balls of clear crystal, slabs of polished wood.

Only a good sense of the artistic will save you. But since many accessories are inexpensive, it may be as wise to change them fre-

quently as it is to change the accessories in your costume. Accessories date a person whether they be in costumes or home decoration.

Study house-furnishing magazines; look at the stores. Remember the art training you are getting in school and let your "conscience be your guide."

But remember that neither a mirror nor a picture has to be framed the same way always and forever.

Remember that a mirror's purpose is to reflect, to give glitter, or to light up a dark corner.

Don't scorn the illustrations in magazines nor the covers found on them. Many of them are worth framing and hanging, temporarily at least.

Put growing things in the room. To hold a plant you can buy a smart white wire flower holder, or a witch ball, or a new vase.

Use candles freely, but don't treat them as something sacred, never to be burned. There are plenty more in the dime store.

Modern Modes in Materials

At the time this book is being written, "smooth" is a current bit of slang. Girls still refer to their favorite boy as a "smoothie."

Perhaps that use of the word is popular at this time because it expresses a tendency of the times. Decorators are fond of using smooth surfaces. Metals are in high favor, so are plain woods smoothly polished.

So universal has this tendency toward smoothness become that decorators have felt the necessity of introducing contrasts by using rough fabrics in carpets and hangings.

Cotton may be roughed up into corduroy or it may be slicked into cellophane. Cellophane is the smoothest of the "smoothies" at present.

Not for centuries have so many new materials for building and decoration been put upon the market. The stories of their happenings are fascinating. It is regretful that we can't give them here in detail. But let's look at the new materials used extensively to-day:

New materials may be grouped into cellulose products, plastics, and new metals.

Both rayon and cellophane are made from wood pulp.

Under cellulose we have rayons, aceles, and cellophanes. Cellophane, like rayon, comes from machine-chewed wood pulp treated with chemicals. Cellophane may be found as plain unadulterated cellophane which wraps everything but a new-born baby or it may be laminated with cloth and made into garment bags. It may be woven and made into hangings or rugs.

Fabrikoid and permatex are two smart and useful fabrics. They are cotton cloth with a coating of pyroxylin, a specially prepared nitrated cotton. The material, when ready for the market, is tough and waterproof, mothproof as well. It is used to upholster chairs, make sun umbrellas, cover walls.

Next we come to the plastics. Here we have bakelite, invented by Dr. L. H. Baekeland in 1907. It is made of carbolic acid and formaldehyde. These two, when put together, form a residue which may be molded under heat and pressure. Before molding it may be combined with mica, wood flooring, asbestos, and fabrics.

Bakelite is used extensively in the electrical and machinery world. But we find it in the home as well. Bakelite beds are an example.

Micarta and formica are two variations of bakelite. They are laminated materials; that is, a layer of cloth, paper, or what have you, is covered with a layer of the "stickum" or bakelite, another layer of paper is added, then more "stickum", etc. Fused under pressure we get the new materials. They come marbled, or finished to look like wood, or left plain.

Then we have vinylite, first shown to the public at the Chicago Exposition. This is a by-product of calcium carbide made from marble or coal. At the vinylite exhibit it was used for everything but the kitchen range and the bath tub.

Another product of calcium carbide is beetleware.

Then there is pyralin, which brings us back to chemically treated cotton. Pyralin is found on the backs of toilet sets, towel racks, and piano keys.

Glass is being used as a plastic. In 1925 at the Paris Exposition the room designed and executed by Lalique had carved glass walls, glass-block floors, carved glass tables; heavy substantial affairs lacking a luster associated with glass. Vitrolite is a glass tile.

When we come to luster, then we think of the metals — and the first metal is the so-popular one to-day — chromium. Chromium is a crumbly grayish stuff, but when treated it becomes one of the hardest and most durable substances known. It is used in the making of stainless steel. It is used to coat other metals. The man who is responsible for the vogue of shiny chromium is Dr. Colin Fink of Columbia, who, in 1922, had found a way to make plating with chromium commercially practical.

All of these substances have virtues of their own. They may be more plastic, more durable, more versatile, more workable than any substances heretofore used. We call most of them synthetic. Unfortunately, we still think they should be made to look like materials they replace.

When we accept them for what they are, allow them to look like themselves, then we shall have more honest design and better effects.

Monel metal, an alloy containing some nickel; and neoprene, a more durable substance than vulcanized rubber, are found in modern kitchens and workshops.

THE WELL-PLANNED AND FURNISHED HOME

Books to Be Used as References

Agan, Tessie, *The House*, J. B. Lippincott Company, Philadelphia

Allen, Edith L., *American Housing*, Manual Arts Press, Peoria, Illinois

Arlitt, Ada Hart, *Our Homes*, National Congress of Parents and Teachers, Washington, D. C.

Aronovici, Carol, and McCalmont, Elizabeth, *Catching Up with Housing*, Beneficial Management Corporation, Newark, N. J., distributed through Baker and Taylor Company, New York

Bemis, Albert F., *The Evolving House, Volume I, National Design*, The Technology Press, Cambridge, Massachusetts

Burris-Meyers, Elizabeth, *Decorating Livable Homes*, Prentice-Hall, New York

Bush, Florence, and Welbourne, Frances, *Design: Its Fundamentals and Applications*, Little, Brown and Company, Boston

Davies, J. E., *Fundamentals of Housing Study*, T. C. Contribution Number 759, Bureau of Publications, Columbia University, New York

Donovan, Dulcie, *The Mode in Dress and Home*, Allyn and Bacon, Boston

Frary, I. T., *Early Homes of Ohio*, Garrett and Massie, Richmond

Goldstein, H., and Goldstein, V., *Art in Everyday Life* (Revised), The Macmillan Company, New York

Gray, Greta, *House and Home* (Revised), J. B. Lippincott Company, Philadelphia

Halbert, Blanche, *The Better Homes Manual*, University of Chicago Press, Chicago

Hottes, A. C., *1001 Garden Questions Answered* (Revised), A. T. De La Mare Company, New York

Lockwood, S. M., *Antiques*, Doubleday, Doran and Company, New York

Lockwood, S. M., *Decoration*, Doubleday, Doran and Company, New York

Maas, Carl, *Common Sense in Home Decoration*, Greenberg, Publisher, New York

Matthews, Mary L., *The House and Its Care* (Revised), D. C. Heath and Company, Boston

McClelland, N., *The Young Decorators*, Harper and Brothers, New York

Miller, Gladys, *Decoratively Speaking*, Doubleday, Doran and Company, New York

Nicholas, Florence, Williams, M., Clare, N., Trilling, Mabel, *Art Activities in the Modern Home*, The Macmillan Company, New York

Parsons, Frank A., *Interior Decoration*, Doubleday, Doran and Company, New York

Peet, L. J., and Sater, L. E., *Household Equipment*, John Wiley and Sons, New York

Robinson, Ethel F. and Thomas P., *Houses in America*, The Viking Press, New York

Rockwell, F. F., and Grayson, Esther, *Flower Arrangement*, The Macmillan Company, New York

Russell, Mabel, and Wilson, Elsie P., *Art Training through Home Problems*, The Manual Arts Press, Peoria

Sherwood, Malcolm H., *From Forest to Furniture*, W. W. Norton and Company, New York

Shultz, Hazel, *Housing and the Home*, D. Appleton-Century Company, New York

Shultz, Hazel, *Making Homes*, D. Appleton-Century Company, New York

Stewart, R., and Gerald, J., *Home Decoration, Its Problems and Solutions*, Garden City Publishing Company, New York

The President's Conference on Home Building and Home Ownership. *Homemaking, Home Furnishing and Information Service*, Reports of the Committees on Homemaking, Housing and Family Life; Home Furnishing and Decoration, Home Information Services and Centers, edited by John M. Gries and James Ford, Washington, D. C.

The President's Conference on Home Building and Home Ownership. *House Design Construction and Equipment*, reports of Committee on Design, Construction and Fundamental Equipment, edited by John M. Gries and James Ford, Washington, D. C.

The President's Conference on Home Building and Home Ownership. *Household Management Reports of the Committees on Household Man-*

agement and Kitchens and Other Work Centers, edited by John M. Gries and James Ford, Washington, D. C.

The President's Conference on Home Building and Home Ownership. *Housing and the Community*, *Home Repair and Remodeling*, reports of the Committees on Housing and the Community; Joseph H. Pratt, Chairman; Reconditioning, Remodeling and Modernizing, Fred M. Feiker, Chairman. Edited by John M. Gries and James Ford, Washington, D. C.

Trilling, Mabel, and Nicholas, Florence, *The Girl and Her Home* (Revised), Houghton Mifflin Company, Boston

Trilling, Mabel, and Williams, Florence, *Art in Home and Clothing* (Revised), J. B. Lippincott Company, Philadelphia

Tucker, Milton, *Buying an Honest House*, Little, Brown and Company, Boston

Watson, Frank, *Housing Problems and Possibilities in the United States*, Harper and Brothers, New York

Whitman, Roger B., *First Aid for the Ailing House*, Whittlesey House, New York

Whitton, Sherrill, *Elements of Interior Decoration*, J. B. Lippincott Company, Philadelphia

Other References

Bulletins from the government such as:

"Floor and Floor Coverings," U. S. Department of Agriculture, Bulletin 1219

"How You Can Own Your Home," Federal Housing number 2065, Washington, D. C.

"Furniture, Its Selection and Use," U. S. Department of Commerce

"Services of the Federal Government to Home Owners and Tenants," U. S. Informational Service

"Modern Design," Federal Housing Administration, Technical Bulletin Number 2

"Recent Developments in Dwelling Construction," Federal Housing Administration, Technical Bulletin Number 1

"Care and Repair of the House," Phelan Vincent, U. S. Department of Commerce

Pamphlets from magazines such as:

"Your Windows," *Ladies' Home Journal*

"Selection and Arrangement of Furniture," *Ladies' Home Journal*

"Using Color in Decoration," *Ladies' Home Journal*

Bulletins from extension services of state universities such as:

"Owning a Home," circular number 15, Engineering Experiment Station, Ohio State University, Columbus

"A Study of Efficient Kitchen Arrangements," bulletin number 418,

Agricultural Experiment Station, Purdue University, Lafayette, Indiana

Bulletins from commercial firms such as:

"Walls Make the Room," The Wallpaper Institute, 19 West 44 Street, New York

"Your Windows, How to Curtain Them," Quaker Lace Company, 330 Fifth Avenue, New York

"The Mahogany Book," George N. Lamb, Mahogany Association, 75 East Wacker Drive, Chicago

IV. THE WELL-SPENT DOLLAR

UNIT 1. DISCUSSION OF CONSUMER PROBLEMS

When you asked Mother about the advisability of inviting guests for Sunday supper, did she say anything about the expense? Did she tell you that in her day she was not allowed to have such elaborate refreshments as you have planned? Do you suppose that she really objected to the party, or was she disturbed because she has learned to pay careful attention to the way in which she spends every dollar? Do you suppose that we talk more to-day about a well-spent dollar than her mother and grandmother ever did?

Neither your mother nor your grandmother had a course in consumer education and consumer buying when they went to school. Your great-grandmother never even heard of it. Why, then, do so many schools list it as a prescribed *must*, required for graduation?

Certainly your great-grandparents consumed many things. True, most of them were produced right on great-grandpapa's farm. The family consumed what it produced and bought little. That is an oft-told story which you have heard before.

Grandmother lived in a village. She had to buy more things than her parents did. In the small town where grandmother lived she knew everyone. She knew, for instance, that one John Doe who kept a small store was not as honest as he should be. She knew she would have to watch him when he weighed the butter. She knew she would have to feel the new dress goods he was selling to see for herself whether it was really "all wool and a yard wide." That tricky man was well known in the village. Perhaps his reputation explained the smallness of his store. He stood out like a black sheep from the ninety-nine other white sheep or honest neighbors and tradesmen.

The chances are that your great-grandfather did a little horse-

trading now and again. It was all in the spirit of good fun. He knew, and his opponent knew, that it was a matching of wits. The loser never really believed that he had been unfairly treated. Both men went into the trade with their eyes wide open. They were two clever men, well known to each other, taking enjoyment in outwitting one another.

There was a basic difference between the tricky man, John Doe, and the horse trader. One was crooked from choice and the other was smart just for the fun of pitting his wits against an adversary worthy of him.

That was years ago, but human beings have not changed so much after all. Doubtless you know someone who, alas, is not always to be trusted. You may know, too, the person who likes to argue mostly for argument's sake. The first may be likened to the wily shop dealer and the second to the wordy horse trader of an earlier day.

The human race has gone on perpetuating itself all these years in just about the same proportion of dishonest and honest folks. This may be one explanation of why we need courses in consumer buying and consumer education.

"But," you say, "why consumer education to-day any more than in an earlier day? Did not these tricksters have to be guarded against even then?"

Yes, they did, but you see people knew their neighbors better than they do now and one's circle of trading was smaller. To-day the crooked person may be situated a thousand miles from where you live, but his goods may be sold in the stores of your town. His products are offered at the counter with other manufacturers' goods — perfectly honest and meritorious products — and a close glance does not suffice to distinguish the difference.

Another reason for courses in consumer education is this: We have to buy so many things to-day that we formerly obtained from our own home industries. The products we use and consume come from the factory and not from the home. We are living in the machine age. Great-grandmother knew what went into well-made shoes for she saw them being cobbled in her own kitchen by great-grandfather. We select our shoes from a vast array in a large store. We have to judge by outward appearance, by price, by

the manufacturer's name made known to us through advertising, by the reputation of the store in which we are doing the purchasing. We know practically nothing about the requirements of a well-made shoe.

In addition to the reasons for consumer education which have thus far been mentioned is the fact that technological advances have so altered the appearance of manufactured goods that even an astute buyer such as great-grandmother was would not be able to tell to-day whether the cloth she was feeling was really "all wool."

Such changes are not to be decried. These products are new, usually long-lived, frequently inexpensive, laboratory-born and controlled. They are more consistent in quality and in the performance they offer than many of the products which grandmother used that were "natural" in source.

Man is a curiously unimaginative creature. He goes from the known to the unknown. For instance, when the automobile was being developed to take the place of the horse and buggy it never occurred to the inventors to place the motor — the part that made the buggy go — anywhere but in front of the buggy box. The motor was taking the place of the horse and, therefore, should be in what might be called "the horse's traces."

When man evolved a new filament for textile purposes, a filament which was slippery, shiny, smooth, reminiscent of silk, it never occurred to him to offer it as a fiber having its own peculiar and individual value. He called it by the name "artificial silk" and thereby handicapped it at the start. The first makes of sleek-surfaced wallboards designed to take the place of clay tile were so shaped and grooved that they looked like tile. Only later did it occur to the makers that large, smooth sheets of this new plastic-covered material might merit a name and might possess an individuality and shape of their own.

In other words, we are usually asked to accept something new in terms of going from the known to the unknown; seldom in terms of the unknown itself, at least at the start.

After the invention of rayon, textile makers apparently became fired with inventive ideas. Soon their mills began to offer wool that looked like cotton, silk that looked like linen, linen that looked

like wool, and rayon that looked like all of them. Now that the different appearances of the four textile fibers have been changed, it is difficult for us to know what we are buying. We can no longer rely on looks or "feel." Textiles need an identifying label.

It was said earlier that a horse trader enjoyed waging a war of wits and words because he knew he was dealing with an equally able adversary. Ultimately slick words and phrases became enjoyed for their own sake. The maker of them was not concerned primarily with the effect of his apt phrases on the slow thinker or the simple-minded man who believed that all men spoke unadulterated and unadorned truth.

In the early days of advertising two men who advertised the same product very likely received as much enjoyment out of selling their product to one another as two horse traders did. Each man realized the extravagances in the statement of the other. To-day horse traders are few and far between. So are advertising men who use extravagant phrases full of flattery and overstatements. Truth in advertising may have made life less picturesque, but it is safer for the man who wants to trade his dollars for goods.

The economic state of our country presents another need for consumer education. We are apt to forget that it was less than two hundred years ago that we were fighting the war of independence and forming ourselves into a federation of states. As the ages of nations go, the United States is a young thing — a mere stripling. Add to our youth the fact that the last seventy-five years have seen marvelous changes in modes of transportation and in methods of communication. Our birth rate in the last two hundred years has been a mounting one. Our land had frontiers and to spare. All of these things combined to give the United States economic indigestion. We grew too fast, we gulped things down too fast. Production of goods could scarcely keep pace with the mounting demands for these goods. It is true that few people had enough money to supply all their needs but that was because the needs multiplied every time that the incomes went up.

But the birth rate in the United States is no longer rising steadily. Economic distress is world-wide. Incomes have gone down. Production, consumption and standards of living have undergone much adjustment in the last ten years.

If standards of living are to be raised (and that always has been a fetish in the United States) or if the standards of living are even to be maintained, it looks as if the money earned would have to be made to go further. If leisure time is to be increased for one and for all, the budgets are going to have to allot more money for leisure-time activities. If there was not enough money before and if new demands are to be made upon the smaller amounts now in hand, then we must be more sure than ever that not a single penny is wasted. That means there must be education in wise spending.

But few of us consciously want to be educated. We know in a rather vague way that we *should* be able to get more for our money, but not many of us have formulated our needs or know how to make them articulate. Curiously enough, it is the progressive merchant who serves us who has seen the necessity for educating us. It has been a matter of self-preservation with him. He realizes that unless we are satisfied with what we buy he will have to go out of business. Therefore he has called on the intelligent manufacturer, the understanding advertiser. He has given a willing ear to trained women such as are found in the home economics profession. Now they are working together to combat our apathy and our ignorance. They are enlisted to protect us against the occasional black sheep in the manufacturing and merchandising world. They are concerned with us as consumers and with our need for education.

UNIT 2. THE BUDGETING OF INCOME AND OUTGO

We start with the budgeting of money because, after all, money, or the amount of it you have to spend, will influence most of your activities. If there is money for a laundress you won't have to do the washing. If there is money for a car, you won't have to allow as much time for marketing as you would if you had to walk to the store.

Budgeting can be fun. Really it can. Budgeting is not saving and scrimping. Budgeting is planning the spending of your money. And if you don't enjoy spending, then you are one of the rare Midases of the world.

There is no budget in print which fits your case exactly. There never can be, any more than there is one perfect dress pattern. You and your family need a budget fitted to your needs. But there is a money budget pattern. Once we get it in our hands we can do the altering to fit the figure, or perhaps we should say figures.

Before we state those guides we need to find out whether our income belongs in the existence, or decency and health, or comfort, or luxury group.

The first assures its owners nothing more than enough food, shelter, and clothing to keep the family alive and protected from the elements.

A living, or decency and health budget gives adequate food for nourishment, with slight chance for choices; sufficient clothing for cleanliness and durability; shelter that has at least the rudiments of sanitation; operating expenses; enough money to pay for heat, light, and water; and a surplus which gives a small saving and a few chances for recreation.

The comfort income assures choice of foods in addition to adequate nourishment; comfortable clothing suitable for demands upon the family and the climate. It assures selection for choice and beauty, but only when that selection is made with care. Comfort income allows for living quarters that are safe physically and morally. It assures good sanitation and some degree of privacy and comfort for each member of the family. The operating expenses are on the same scale as allowed for the first three items. The savings and advancement opportunities in this income group are sufficient to develop the spiritual, mental, physical, and social sides of family life.

The luxury income allows greater choice of foods; more clothes of finer fabrics; freedom from necessity for any pinching economies in operating; plenty of money for travel and magazines; fostering of social and mental life; and a comfortable financial bulwark.

It is impossible to say that any group starts at one income and stops at another. Here, again, it is quite largely an individual family matter. A college-bred family may take a college education for the children as a necessity, even in the living-income group.

Another family may consider this unnecessary, but tne possession of a new car every other year may seem vitally important.

There are two things you cannot try to do at your age in this matter of budgeting — one, try to get Mother and Father to revolutionize their way of working out the family finances; two, plan a definite budget for your new home which you hope to establish in the not too far distant future.

You'll have to run your own home for a year before you are ready to set up a working budget for your family, but you can start with one that follows the general outline of the pattern budget.

It is necessary to keep accounts of your expenditures as a preliminary to your budgeting. That's why you start with a ready-made pattern and adjust it later. Get a small box such as is used as a recipe file. This box can be painted a gay color so that you get a lilt of spirit every time you come near the budget work. Or buy a blank book, say at the dime store. Get one over which you can paste a gay cover. It's camouflage but it helps.

If you use the card system, head twelve cards "Income" and give each one a month name, January, February, etc. If you choose a blank book, use twelve left-hand pages for "Income." On the opposite pages, twelve of them, each marked with a month name, make seven lengthwise divisions. If you use cards, label seven cards for each month. Head these cards, eighty-four in all, or the twelve pages, "Outgo" or "Expenses." There ought to be thirty-one crosswise divisions on each card or page.

Head the expense cards or columns as follows: Shelter, Food, Clothing, Operating Expenses, Advancement, Savings, G O K.

The G O K is not an orthodox budget heading, but it may be used to keep track of small missing amounts that have been spent, but for what, "Goodness Only Knows."

On the Shelter card you enter rent, business carfare, possibly water rent. That may be paid by the owner from whom you rent. If you own or are buying your home, you list payments on the house, interest on mortgage, taxes, depreciation or expenditure for upkeep of house, business carfare, and fire insurance.

Under Food you list foods, beverages, ice. It is not wise to attempt to subdivide the food expenditures at first. Later on

when you are interested in data, you may subdivide food into milk and cheese, which should take one-fifth of the food money; meat, fish, and eggs — one-fifth; fresh fruit and vegetables — one-fifth; fats, sugars, and other groceries — one-fifth; bread and cereals — the remaining fifth.

Under Clothing you list clothing and dry cleaning bills, or upkeep.

Under Operating Expenses you list gas, electric light, fuel, telephone service, laundry, laundry and cleaning supplies, upkeep of yard, repairs and replacement, stamps and stationery, express. Replacing broken goblets or worn-out towels is in this list. So is the bill for repairing the stopped-up sink.

Under Advancement you list income tax, philanthropy, religion, health, education, social clubs, recreation, new large equipment, new sets of goblets or towels, personal gifts, automobile.

Under Savings you list bank accounts, insurance, investments.

The Income sheet has fewer items, alas; but they are usually large ones as compared to those on the Outgo sheet. On this sheet is listed salary or wages, called money income; income from sale of produce, etc.; dividends; annuities; money gifts.

Does it all seem bewildering? It need n't, for there are certain fixed amounts of your income that you can list at once — the wages or salary. But suppose the man you marry or suppose you yourself, when you are employed, get commissions; or suppose you are a lawyer with big fees coming in occasionally but with lean weeks when there is nothing; or suppose you raise stock or produce for sale. Then all you can do is to keep track of the income for a year. Three years is better, but that seems like a lifetime. Take the incomes for the three years, average them for one year, then for one month, and you are set with a figure which is safe.

Annuities are n't due for so young a person as you. Dividends almost vanished in 1929. There go glimmering two sources of income.

Gifts — well, they are always uncertain. But Christmas and birthdays do have a way of rolling round, so there is hope.

With these figures we have our income in tangible form.

Now for the fixed expenses. There is a minimum you have to pay for telephone. When the calls exceed the number allowed,

or when you have a number of long-distance calls, the bills get higher. Perhaps too high. Here is a good chance for you to check careless use of the telephone. Other fixed expenses are: the wage paid to maid or laundress; the bill for newspapers; business carfare; payments on insurance; payments on the house or on the mortgage; installment purchase payments.

Gas may vary because you use it for heating for some parts of the year while the rest of the time it is used only for heating water and for cooking.

The electric light bill ought not to vary greatly. That soon finds a level and stays just about there.

That leaves food, clothing, advancement, savings — with great possibilities for making you smile with satisfaction or sigh with worry.

Savings. What about the savings item? Budget patterns show ten to twelve per cent of the budget allotted for savings. Is there any use in saving? Shades of our great-grandmothers — think of asking such a question! But our great-grandmothers did not go through the tragic years of 1929–1933. They did not see bank holidays declared nor many banks close their doors, many never to reopen. However, new banking laws have been made and we hope future generations won't see catastrophes of that sort repeat themselves.

It is quite true that people are still saying, "Well, I wish that I had taken that trip when I wanted to. My money went anyway, in the stock market crash. I never did get what I had saved for." True. But think of the people in the past who *have* been able to take trips because they had saved for such vacations. It has been done and will be done again. It just happened that things went awry in 1929 and thereabouts. They will right themselves again.

A woman said the other day that in 1912 she had taken out insurance which would mature at the end of twenty years and all through that twenty years as she was making her payments she was looking forward to a trip. When the insurance money was paid to her in 1932, she had to use it to keep the mortgage on

her home from being foreclosed. She does n't regret the saving. She mourns the vanished trip, but she rejoices in the home she was able to salvage. Saving still has virtues.

There is another point to be stressed in that savings plan of hers. It was with an old-line, straight-insurance company.

Government bonds, postal savings, old-line insurance are not spectacular, not able to make you wealthy over night, but they do afford you a surety that is worth considering.

Perhaps, until conditions get settled, we should buy the things we want, but we should aim high in the wanting. And we should plan to spend the saved money within a year or two, not twenty years from now. We may be saving for a fur coat or a trip next year. Or we can say, "Save, pooh, why should I save?" And then ten cents goes for a sundae, thirty cents for a movie, a half dollar for a taxi ride, two dollars for a bottle of perfume. These vanish in a moment and we have neither the money, the fur coat, nor the trip.

There are few fairy godmothers amply able to give us everything we want. True, if we are freezing or starving, the charities will come to our aid. We won't die, that's true. We shall continue to exist. But who wants to continue on a mere existence income? Why not save a penny to-day and a dime to-morrow so that day after to-morrow we have that twenty-five cents for luxury?

Food. In 1939 the Associated Charities of Cleveland allowed \$8.85 a week for food for a family of five. In 1945 that figure rose 40%. That's a minimum on which life can be sustained, but it offers only monotonous fare.

The budget pattern says that from 20 to 25 per cent of the income should go for food. That's for a normal family and a normal income. John D. Rockefeller could not eat, unaided and alone, one-quarter of his income. But Johnny Jones' family of nine on an income of \$100 a month cannot manage on one-fourth or \$25 a month for food. In the lowest income groups, the amount spent for food may have to exceed 50 per cent.

This may be stated as a general truth: As the income increases the percentage spent for food decreases.

Ernst Engel formulated that rule in 1867 from his study of some Saxony budgets. He was the great pattern budget maker of all time.

Shelter. The amount spent for shelter should be from one-fifth to one-fourth of the income. But like all the other pattern figures this may need adjustment. If a family of small children needs to get into the suburbs, the cost of shelter, including business carfare, may go over the 20 per cent. But out-of-door living cuts the costs of doctor care for the children.

Clothing. The amount spent for clothing should not exceed 15 per cent. Suppose you are newly married and staying at home. You have a trousseau. Your first year's bills for clothes are small. The second year you are still at home and the clothes are beginning to wear out, but you use a great many house dresses because you are not going out as much as you did. Clothing cost is still low. The third year you spend some time at the hospital and arrive home with a baby daughter. Clothing cost is still low. By the fourth year you are going out again and your clothes are worn out or out of style. Your clothing costs are now high.

Or suppose you work in an office. You can't slip into a house dress when you are working. Clothes for office wear, for street wear, and for business appointments make your clothing budget high.

Or suppose you are handy with a needle and are at home. The new clothes you can have will be greater in number and your clothing bill will be less than that of the girl who can't sew or who lacks the time.

You need to consider your clothing costs in relation to the clothing costs and needs of the rest of the family.

In figuring the clothing bill it is necessary to consider the length of service you get from a garment. Suppose you buy a winter coat that is to last for three years. The initial cost must be spread over three winters, but unfortunately the actual payment has to be made soon after purchase. That knocks the budget figure all awry for that month. But if you have saved for that coat, you can get it and still be able to eat and enjoy a play occasionally. Saving does have a virtue, you see.

Operating Expenses. The amount spent for operating expenses should lie between ten and fifteen per cent. In the winter months when the fuel bill is an item, you will have a heavier figure than you will in July. Stamps for all the Christmas gifts you send will

be greater in December than in May. It looks as though the winter months were the ones that exact heavy payments.

Advancement. The amount set aside for advancement is twelve and one-half per cent.

When you marry and the salary is $1500 a year, you ought to be able to set aside $200 the first year. Fewer clothes to buy, but balanced against that are the extra demands for entertaining. You need to repay all the generous people who gave you showers and parties. And then, too, you need a washing machine, an ironer, another chair, and so on and on. Can you save the $200? You can if you really want to do it and if you have coöperation.

Is n't it too bad that spending money is so easy, so interesting, so necessary, and such good fun? But if you did n't spend, there would not be any incentive to go out and earn more. So there are compensations.

Let's return to advancement for a minute. Education — which comes under that heading — includes books, magazines, college, lecture courses. Health includes the doctor and the dentist, the optician and the podiatrist. Mental and physical health are necessary if a person is to have spiritual health as well. All three are needed to make a well-rounded citizen or member of a community. Budget sanely.

Now that we have discussed the budget in general, let's go back to some moot questions.

Under shelter, we entered into no discussion of the question of owning versus renting a home.

The question, "shall the family buy or rent?" has been argued almost as frequently as "which comes first — the chicken or the egg?" There are arguments on both sides.

Here are some arguments for renting:

A renter is not so tied down to one place. If his business changes to another town, he can leave without sacrificing his home. If he wants to move to the other side of town because his office has been transferred, he can pack up and leave.

As a family increases or decreases in numbers, it is possible to rent a house of adequate size.

Localities change in character. If a neighborhood deteriorates, the renter can move.

It is the owner and not the renter who has to pay for the upkeep and repair of the house. The owner has to pay the taxes.

The disadvantages of renting are these:

At the end of ten years, let's say, of renting, the renter has nothing but paid rent receipts to show.

The owner may decide to sell and the renter may have to move at a time when it is most inconvenient.

The owner may not be willing or able to keep the house in repair.

The renter has to take a house which has been lived in by some one else.

When a family own a home, they have a feeling of belonging, a feeling of stability. There is a permanent place to stay when financial winds blow gales and hurricanes.

Owners become a part of the community. "Home ownership is not merely an investment in house and community. It is an investment in life, in family living, in social standing, in safeguarding American liberties."

But more important than anything else is the fact that the yearning for a permanent abiding place — a home — is satisfied. Nomads there are, wanderers over the face of the earth, gypsies in blood and tradition, but most of us want a roof tree of our own. That is achieved by owning one's home.

How does one go about owning a home?

First comes the question of money. What will the house and lot cost? And to counter that we have this: how much should one pay for a home? It is safe to say that the cost of a home should not amount to more than three times the yearly income, or that the payment for any given month should not exceed one-third of the income for that month. For even while buying a home it is necessary to eat and to be clothed. Ravens and heavenly manna are not in fashion, or at least not in evidence, these days.

After you have set the figure you can pay, comes the second step — selecting a location.

"The location of your home is a very important matter. You must consider the size of the lot, the soil, the elevation, the environment, the influence of the adjacent property, the view, not alone

as you look at the property, but as you look from it, because as you live in it you will look from it; public utilities, that is: the paving, the sewer, water, gas, electricity, and transportation facilities. You must give careful consideration of the assessments, having particularly in mind paving assessments for corner lots; the proximity of schools and churches, and the civic spirit of the community. These matters are not all financial factors, but matters that will influence the physical, intellectual, and spiritual development of your family." [1]

The next step is the method of financing the building. Before 1929 we could have laid down some rather definite rules. We would have talked learnedly about building and loan associations, buying on land contract, and other types of financing.

The only advice which is safe just now is this — go to an authority and talk over the matter frankly. That authority may be a government official, he may be a member of the bank staff, or he may be a lawyer. But somewhere in your town you will find a person who can give an unbiased opinion as to what is best to be done in the year you happen to be building.

F. H. A. (Federal Housing Authority) insures long-term mortgages. Payments include interest and amortization.

We add certain cautions to those suggested thus far:

Be sure the title to your new property is clear.

Be sure that your deed or abstract is for the property which you think you are buying.

Be sure that you know the boundary lines and have them properly marked before you start to build.

CLASS ACTIVITIES

1. Make a list of the various types of expenditures in your home.

2. Using these as headings, work out a system which might be suitable for the keeping of household accounts for your family.

3. Using a typical income in your community and considering the standards of living there, make a budget which might suit a given family. Would this have to be changed for your family?

[1] "Owning a Home," Engineering Experimental Station, Circular 15, Ohio State University, Columbus, Ohio

4. Calculate the cost of food for one week for a family of five on a minimum adequate diet in your community. If the family lives on a farm, list the foods at market prices.

5. Find out what rent is paid for the average house in your community.

6. If you own your own home, see if you can find out what it costs your family per year for upkeep, taxes, and interest on money invested.

7. Have a class debate on the subject, "It is more advisable to own one's own home than to live in rented property."

8. Find out what it costs to build a home which might meet the needs of families on various incomes.

9. If any of these families desire to build, how much money should they have for a down payment? How might the financing of the rest of the cost be taken care of?

10. Plan a clothing budget for a family of five, living on an income of $1500. The family consists of a father, a printer; a mother; a girl of sixteen who is a junior in high school; a boy of twelve in the seventh grade; and a three-year-old girl. Decide which of the garments included will be purchased ready made and which should be constructed by the mother and daughter.

11. Find out what the average family in your community pays for the following per month or year: (1) gas; (2) electricity; (3) coal or other heating; (4) telephone service.

12. Make a list of household equipment which might need replacement during any one year in one's home.

13. What per cent of the income of the average family should be spent for advancement? How much should they save? How much can they give to the church or charity? What magazines or books can the family afford? What possible doctor bills may have to be met?

14. What labor-saving devices can the family in question afford?

15. Ask your local banker what methods of saving money he advises and the amount that should be saved on various incomes.

16. Make a schedule of the present plan of work in your home for an average week.

17. Make a list of jobs performed by an average home-maker in your community.

THE WELL-SPENT DOLLAR

Books to Be Used as References

Abel, Mary, *Successful Family Life on a Moderate Income*, J. B. Lippincott Company, Philadelphia

Austin, Kay, *What Do You Want for $1.98?* Carrick and Evans, New York

Ball, Katherine, and West, Miriam, *Household Arithmetic*, J. B. Lippincott Company, Philadelphia

Brindze, Ruth, *Johnny Get Your Money's Worth* (*and Jane, Too*), The Vanguard Press, New York

Chase, Stuart, and Schlink, F. J., *Your Money's Worth*, The Macmillan Company, New York

Coles, Jessie V., *The Consumer-Buyer and the Market*, John Wiley and Sons, New York

Craig, Hazel T., *Consumer Buying*, D. C. Heath and Company, Boston

Dana, Margaret, *Behind the Label*, Little, Brown and Company, Boston

Donham, Agnes, *Spending the Family Income*, Little, Brown and Company, Boston

Erkel, Agnes M., and Shiras, Sylvia, *Mrs. Consumer's Dollar*, Burgess Publishing Company, Minneapolis

Erkel, Agnes M., and Wagoner, W. P., *Today's Consumer Family*, Burgess Publishing Company, Minneapolis

Friend, M. R., *Earning and Spending the Family Income* (Revised), D. Appleton-Century Company, New York

Kennedy, Ada, and Vaughn, Cora, *Consumer Economics*, Manual Arts Press, Peoria

Kyrk, Hazel, *Economic Problems of the Family*, Harper and Brothers, New York

Lawrence, Josephine, *If I Have Four Apples*, Frederick A. Stokes Company, New York

Lazo, Hector, and Bletz, M. H., *Who Gets Your Food Dollar?* Harper and Brothers, New York

Los Angeles Board of Education, *What About Dollars?* Los Angeles City Schools

Mann, George C., *Bibliography on Consumer Education*, Harper and Brothers, New York

Reich, Edward, and Siegler, C. J., *Consumer Goods*, American Book Company, New York

Reid, Margaret G., *Consumers and the Market*, F. S. Crofts and Company, New York

Weiss, E. B., and Mermey, Maurice, *The Shopping Guide*, McGraw-Hill Book Company, New York

Other References

Bulletins from extension services of state universities such as:
"Planning the Family Budget," Iowa State College, Ames, Iowa
Pamphlets and bulletins from commercial concerns such as:
"Good Housekeeping," Department of Merchandising Education, 57th Street at Eighth Avenue, New York. Bulletins on men's shirts, rayons, cottons, silks, wools, lingerie
"Better Buymanship," Household Finance Corporation, Chicago
"Money Management for Households," Household Finance Corporation, Chicago
Bulletins from the government such as:
"Planning and Recording Family Expenditures," Farmers Bulletin, Number 1553
"A Policy Insuring Value to the Woman Buyer, and a Livelihood to Apparel Makers," U. S. Department of Labor, Women's Bureau, Bulletin Number 146

V. THE WELL-MANAGED HOME

GENERAL DISCUSSION

Again concerning the Sunday supper you talked over with Mother — did she wonder whether she or you would have time to get the house and the food ready?

The chances are that Mother did say something about both those subjects. You see, Mother is a manager and has to plan her money so that the accounts come out even. She has to plan her time so that she is not too worn out from too much housework. Managing includes the plan and the performance, or carrying out the plan. The two are not synonymous, by any means. Some people can plan anything but can't carry it out. Other people carry out a plan which is presented to them, but can't make a plan to save their lives.

Most mothers become good managers. They have to be, or they never could juggle money, and work, and people and have anything but bedlam. If you don't believe that, you try to run the house for a week.

Good management is difficult to teach. It is learned in the hard school of experience. Mother may scold you because you let the beans burn. You excuse it by saying you were studying your lesson on management and Mother sniffs and says, "Huh, a nice lot you can learn about management from books. Why I can get the dinner, and take care of baby, and answer the telephone, and set the table, and hunt for John's cap, and start the pie for supper and I don't burn the beans while I do it, either." But if it would n't be disrespectful, you might remind Mother that she did not learn to do all that in a day. Mercy no, it has come from experience. She has burned beans in her day too.

What's the use, then, you ask, of trying to learn management in school?

That's a fair question. Here is the answer. There are always at least two ways to do a thing — a right way and a wrong way. Once the wrong way is learned it is difficult to change one's method. It is better to learn the right way first. Even Mother may not know all the right ways, for it takes almost a superhuman being to know the "one best way" to carry on the hundreds of activities included in homemaking.

If, then, the school can point out as many right ways as possible to you, you won't have to unlearn them later. But you must remember to keep an open mind, for new inventions are lightening methods of work, or eliminating some altogether. Don't get a "closed mind", whatever you do. Don't get in the habit of saying, "Oh! my family won't stand for that way of doing things." That sort of response is called "rationalizing." You may make yourself think they won't because it is too hard for you to change your own set of mind.

We can't discuss management without a reference to patterns. Take a dress pattern, for instance. When you buy it, you seldom can use it just as it is. Your shoulders slope more, or your waist is more slender, or you need more length. But think how much your work was simplified by having a master pattern. Suppose you had had to draft your own pattern.

We spoke of Mother's necessity for thinking of the cost of the party. She was referring, albeit unconsciously, to her pattern for money spending or, as it is usually called, her budget.

She thought of the amount of physical effort that would be required for that party and its preparation. Here she was thinking of another pattern — energy spending or budgeting of energy and of time.

She thought, too, of the disappointment you would feel if she said, "No." Here she was thinking of the spending of emotion or feeling, a third budget classification.

Three patterns, then, are up for consideration — spending of money pattern, spending of energy pattern, spending of emotion pattern. Two of them are to be considered under home management — money and energy. Emotion comes under family relationships.

"Spending" and "budget" are paired in the preceding paragraph. To many people "budgeting" means nothing but saving. Wrong. When we save ourselves energy and do no work we become fat and lazy. When we save every penny we become master misers. When we refuse to spend affection we become selfish and cold blooded. Who wants to be fat, miserly, or to resemble a blind fish?

No, we can put our heart into spending energy, money, emotion when we let our head plan the general direction the spending will take. At that we may get tired, be poor and have our feelings hurt but at least we have lived to our full capacity and enjoyed doing it.

UNIT 1. THE BUDGETING OF ENERGY

An advertisement which used to be popular quoted the old saying, "Man works from sun to sun, but woman's work is never done."

It need not be true — that statement that woman's work is never done. Good management *can* schedule housework effectively and make the schedule work. Oh, there will be slip-ups — the telephone rings, the door bell peals, the callers interrupt, and Johnny gets the nosebleed.

But such calamities do not happen every day. If there were not this mistaken notion that housework is perpetual motion, there would be less hesitancy on the part of girls when it comes to going into a home as a maid. They dread it because they say the work is never done and that the girl is never allowed any privacy or time off.

Whole conferences have been held on this subject of scheduling home-making. And most of the conferences get nowhere. You can't schedule home-making, but you can schedule housework. And do it with a schedule that can and will work. Good home-makers everywhere depend on such a schedule.

Suppose we go at it this way. We start with Monday morning and list all the activities. We keep pencil and paper at hand and list them all that day, all Tuesday, Wednesday, and so on through Sunday night.

Then we begin to study them, and aren't we appalled? Over one thousand different activities have been carried on during the week.

Here is a table which shows a study of the home-maker's work-week. Over fifty-one hours a week for a farm woman and forty-six and one-third hours for the city woman. Meals took the greatest amount of time, because they recur three times a day. Care of the house comes second in hours required because beds have to be made daily, rooms have to be "swept and garnished" at least once a day and frequently more often unless the family has been taught habits of orderliness.

THE HOME-MAKER'S WORKING WEEK[1]

ACTIVITY	REPRESENTATIVE RURAL HOMES		CITY HOMES OF THE BUSINESS AND PROFESSIONAL CLASS	
	559 Farm Home-makers	249 Other Rural Home-makers	178 Home-makers in Cities of 50,000 to 250,000 Population	222 Home-makers in Cities of 250,000 Population or More
	Hours per Week		*Hours per Week*	
Purchasing and management	2.2	2.7	4.2	5.3
Care of family	3.9	4.7	9.8	9.3
Meals	22.8	20.7	14.6	11.7
Care of house	9.6	9.4	7.4	7.2
Laundering	5.3	5.2	3.2	2.5
Mending and sewing	5.5	6.2	4.1	4.1
Other home-making	2.3	2.6	4.3	4.8
Total home-making	51.6	51.5	47.6	44.9
Farm and other work	9.6	4.5	2.0	2.4
Help received in home-making	9.3	9.6	30.5	36.6
Average size of household	4.3	4.0	4.0	3.9

[1] Source: Committee on Household Management; President's Conference on Home Building and Home Ownership, "Household Management and Kitchens" (Washington, 1932), pp. 27–28. Taken from "Economic Problems of the Family," Hazel Kyrk. Harper and Bros., New York

We must remember, too, that these hours are spread out over at least a fifteen-hour day and that, in addition, there are such activities as companioning a husband, attending social affairs, mothering the children. These last three activities belong to home-making rather than to housekeeping. And as home-making activities we shall group and discuss them under family relationships.

That leaves meal planning, marketing, care of house, laundering, mending and sewing, physical care of children, tending fires, working in garden, for the fifty-one or forty-six odd hours spent weekly.

Meal planning, cooking, serving, cleaning up, bed making, house "redding up" occur every day. Would n't it seem good sense, then, to study these activities until you have found the "one best way", the most efficient, the least tiring way to do all of them?

What tires a woman as she works? Insufficient light, stuffy or dry air, temperatures too hot or too cold, working heights that make her raise the arms or bend her back for long stretches of time, and poor equipment. (Page 637.)

And we used to think it was the number of hours she worked that tired her!

Study the wiring chart to see whether the house is adequately wired. Study the chart to see whether lights of the right strength are being used. (Page 643.)

Consider the possibility of humidifying the air. Consider, also, the question of having moving air currents rather than tightly closed rooms. Watch yourself work and see at what height you can wash dishes without bending the back, peel potatoes without having to raise the arm. Then adjust the sink and table heights accordingly.

Look over the equipment with a critical eye. Are the knives dull, are saucepans so thin that foods burn before you have time to turn around? Are the utensils heavy, slippery, easily chipped, or rusted?

Have you the best vacuum cleaner, carpet sweeper, and broom that you can get? Have you chosen a flatiron and a broom according to your strength and to the work they must do?

Have you an efficient can opener?

Do you have a tool kit in the kitchen? It should be there, holding two screwdrivers, a twelve-ounce hammer, an adjustable wrench, a putty knife for opening obstinate fruit jars, pliers, oil can, assortment of brads, nails, tacks, screws, and hooks.

But you may have the best equipment in the world and still wear yourself out in the best ventilated and best lighted room that ever was made.

That is because you may never have learned how to save yourself steps. Have you ever made a motion or time study of any one job? The next time you and your sister are wiping dishes watch yourselves. See whether one of you makes more motions than the other when wiping a plate or a cup, or silver. Study to see how few motions are needed to do a good job. Then put into practice the time-saving and energy-saving way.

When you are a bride and "just love your new house", you may find yourself dawdling over the work. That's because you won't have enough to keep you busy and because you will get emotional satisfaction out of handling your own new things. But that's a bad habit. Get yourself all set now in ways of motion and time saving. Then the habit will carry over even in the first days in your new home.

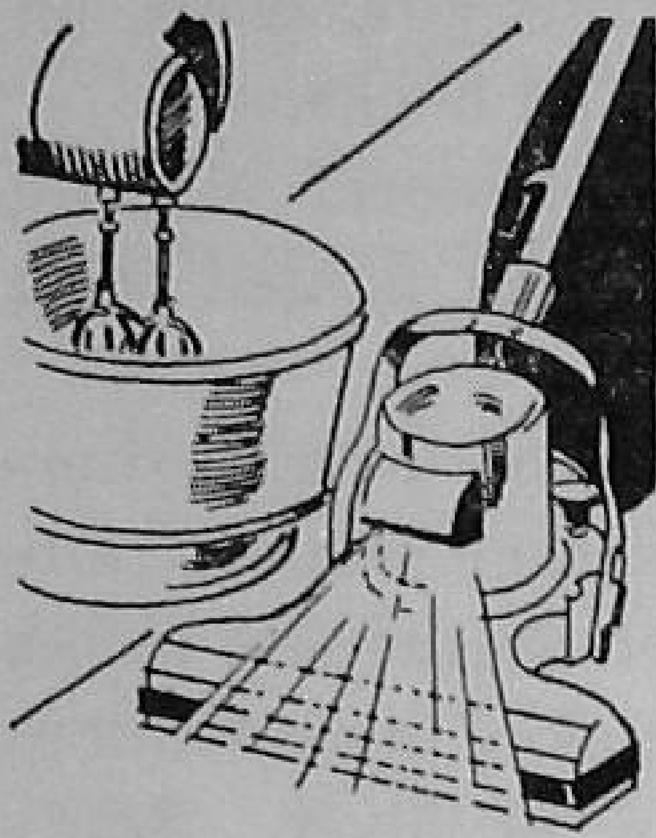
Not only should you practice time and motion saving but you should weigh values as well.

Weigh such questions as, "Is it necessary to wash dishes three times a day? Is a spotless tablecloth for every meal worth the labor cost? Would it be simpler to use doilies or runners for breakfast and luncheon or supper? Is it as important to have a perfectly dusted house as it is to have time for some club or community activities? Shall I have a baked dessert every day and no time for myself or shall I serve fresh fruit occasionally and get a few odd half hours to read or to make myself beautiful?"

When it comes to the labor-saving equipment, you must study your own needs.

If a woman is employed during the day and sends her laundry out, she is foolish to buy a washing machine for the few pieces she may want to wash. But if she has to do the washing besides holding down an outside-the-home job, then she should demand a washing machine and a mangle.

Vacuum cleaners have a place wherever electric power is available, but if a neat and tidy woman lived alone and had little company, she might keep her rooms clean with broom or carpet sweeper. And the exercise might be good for her, too!



If a woman bakes a cake about twice a month, she is foolish to invest in an electric beater. But if she serves mashed potatoes frequently, likes finely sieved apple sauce and cranberry jelly, she is foolish to use up her energy in beating, mixing, and mashing. Let the machine do it.

Suppose that a woman wants these pieces of equipment but can't afford to pay cash. Shall she buy them on the installment plan? There are two schools of thought. One school tells you never to buy on the installment plan. You buy more than you would otherwise. You pay more than the article should cost because the carrying charges have to be met some way. You mortgage your financial future.

The second school tells you to get the article on the installment plan if the equipment is needed to save your energy and health, if you choose equipment which will still be in good condition after it is paid for, and if you are reasonably sure that the income will continue while the payments are coming due.

There are always foolish people who will engage to pay for more than they can, and there are always people who will wear themselves out waiting for the day to come when they can pay cash for what they want. One is as foolish as the other. There is a happy medium. See if you can't travel that road.

Another point to consider is your appearance while working. That affects your attitude toward your work.

What kind of clothes are you going to wear around the house: shoes with runover heels, aprons and dresses that continually slip off the shoulders, dresses that are outworn party clothes with loose sleeves and down-to-the-heel trailing ruffles? Or are you going to wear plain, unadorned, and uninteresting white? Why not put some gaiety into the job by wearing smocks or aprons as colorful as a garden in spring or summer?

Women's work may be never done, but, if so, it 's because they fritter and they have no plan. We have said it before and we say it again.

Here 's one plan that has been used for years and years — wash day, Monday; ironing day, Tuesday; mending day, Wednesday; upstairs cleaning, Thursday; downstairs cleaning, Friday; baking and porch cleaning, Saturday. That schedule may not fit your home at all. But it 's a schedule anyway. Like the budget pattern, it gives something from which to depart.

Here is the way one home-maker works it out:

A Good Schedule for Household Routine Activities[1]

Certain work of the home must be done every day. We list these jobs as daily duties, not to be missed. They include the care of:

All living rooms downstairs
Porches in summer
Dining room
Bed making
Bedrooms
Bathrooms
Halls and stairs
Preparation and serving of meals
Dish-washing
Kitchen, including stove, ice box, etc.
Steps to basement

The following list consists of jobs that we are required to do only one day each week:

Thorough cleaning downstairs
Thorough cleaning upstairs
Thorough kitchen cleaning
Defrost electric ice box or
Clean ice box thoroughly
Laundry
Clean silver
Tidy the basement
Clean out the cleaning closet and clean all the cleaning equipment

There are a few jobs that are better ordered as monthly duties, because they are often put off so long that neglect is revealed. If once each month the following duties are thoroughly done, the general daily care will suffice to keep these articles in nice condition. Once a month give thorough care to the cleaning of:

Linen and silver drawers in the sideboard
The china cabinet
Metal or china ornaments throughout the house
Books in bookcases or on shelves
Piano keys

[1] Reprinted from "Handbook of Domestic Duties for a General Housemaid" by courtesy of the author, Mrs. Ann Nicholas

Now list the days of the week and distribute these duties carefully among the six working days. A little experimenting with time will help in perfecting a satisfactory schedule.

Daily Routine Upstairs. When caring for bedrooms, the beds should be made first, turning the mattresses daily. Wrinkles must be kept out of every cover, so begin by placing the pad smoothly over the mattress. The bottom sheet should be placed with the center crease exactly in the middle of the bed, and must be tucked in well at the top and sides, with the corners folded flat and smooth. The top sheet should be laid wrong side up with the large hem at the top, and should be tucked in well at the bottom. Each blanket or cover should be laid evenly on the bed so that both sides can be pulled tightly and neatly. The hem of the top sheet is then turned back over the blanket for a neat finish to the covers.

Arrangement of the pillows is a matter of choice, but the feathers should be fluffed up thoroughly and the pillows placed at the head of the bed. Smooth them evenly to graceful form. Lastly, cover the bed with the spread and take pains to see that the design is exactly in the center, or that the stripes are perfectly straight. This method results in comfortable beds, well made, and good to look at.

The Bedrooms. If you find shoes and garments about the room, pick these up and put them in the closet. Dust the woodwork and furniture. With a clean cloth dust the mirrors and the inside of the window panes. Remove the articles and the scarf from the top of the dresser, and dust it carefully. Replace the cloth and the articles, arranging them as neatly as possible. Run the carpet sweeper on the rug and dust the floors with the floor mop, not forgetting the floor of the closet.

The Bathroom. The bathroom must have daily care also. The bowl and the tub should be carefully cleaned and wiped dry. A dry rub will keep nickel fixtures shining brightly without a polish. Crevices where the fixtures are joined to the porcelain may be kept clean with a small brush.

The bowl of the closet must be brushed well and flushed, and twice a week a bowl disinfectant and cleaner should be used. Floors must be wiped up twice each week.

A few sheets of moistened toilet tissue rubbed on the mirror daily will polish it quickly. Used towels and wash cloths should be folded neatly on racks, unless they are to go into the laundry chute. Be sure that all soiled towels are well dried before throwing them into the chute.

Woodwork and inside of windows must be dusted. With a damp cloth, remove any finger marks on enamel.

Thorough Weekly Cleaning. There is but one right way to clean a room, and the rule may be applied to any room in the house. Always use CLEAN cleaning equipment. Keep the following articles in the cleaning closet, constantly available:

1. Large washable cloth for covering ornaments, bric-a-brac, etc., on a table. (Piece of an old sheet or a length of unbleached muslin)

2. Cloths to cover silk lamp shades
3. Dust cloths. (Cheesecloth or any old soft pieces of garments from which buttons or snaps have been removed)
4. Wall mop
5. Floor mop
6. Vacuum cleaner with attachments
7. Pail
8. Polish — Oil soap

To get the room ready for cleaning, dust all small articles of furniture and remove from the room. This includes all small light chairs, end tables, smoking stands, magazine racks, etc. Next, carefully dust all ornaments and place them together on a substantial table and cover them with the large piece of muslin. Cover all lamp shades.

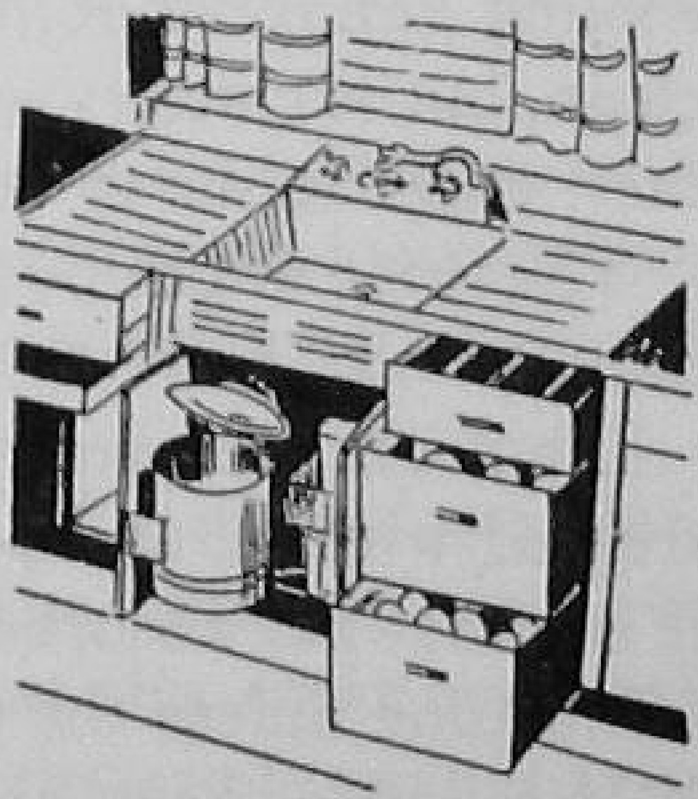
Since dust falls and settles after being stirred up, start by dusting the ceiling and walls with the wall mop. With stepladder or chair, then reach the chandeliers and dust them by hand. Once a month wash the exposed bulbs or glass shades with soap and water.

The woodwork is cleaned next. If of a dark varnished surface, dust with a damp cloth (not wet), using a few drops of furniture oil, and carefully wipe all the surfaces. If of a light enamel finish, use the damp cloth wrung out of slightly soapy water and carefully wipe. Wipe with a dry cloth so that the surface will not be streaked. Do not overlook the tops of doors, the window casements, baseboards, mouldings, and panels.

UNIT 2. THE KITCHEN AS A WORKSHOP

When you say the word "workshop", what do you think of?

Is this the picture — a room which is light, clean, airy; tools at hand; working spaces free, uncluttered, abundant, and made to be used; floor unharmed by litter or dirt?



Is that the picture of your kitchen? Or is it the picture of the kitchen in your house of dreams.

Is it light? A kitchen should have at least one large window, overhead light in the center of the room, overhead light at sink and at range, and a light so arranged that the oven's contents are visible.

Is it clean? A kitchen should have light washable walls, woodwork, washable work surfaces, and an easily cleaned floor.

Is it airy? A kitchen should have cross ventilation if possible.

It should have a ventilating fan either in hood over range or in upper part of a window.

Are tools at hand? A kitchen should not have every knife, spoon, utensil, pot, and pan tucked out of sight behind closed doors. Utensils should be at hand and available. Paring knives, skewers, mixing spoons, and eggbeaters can hang on a small rack near the sink; pots and pans on hooks near the range; pot covers in rack near the range.

Are your working surfaces free, uncluttered, abundant, and made to be used? That's a large order. Free and uncluttered and abundant means more working space than is afforded by the counters under cupboards. A movable working table is needed as well.

Are the working surfaces made to be used? A working surface of plain heavy linoleum is quiet and easily cleaned. Monel metal will dent, but takes hot utensils safely. Formica shows knife marks and will blister if hot utensils are placed upon it, but is quiet and easy to clean. Enamel will chip and is clattery. Wood absorbs grease and stains, becomes water logged and smelly, but is easy on dishes. Rubber tiling has so smooth a surface that one drop of water on a slanting surface will coast a dish down to destruction. Rubber is affected by strong cleaning agents, but it is quiet and smooth. So is cork, but, in addition, cork is absorbent and it scorches under great heat. Marble is absorbent, heavy, cold, and will chip and stain. It makes a marvelous surface for cooling candy or rolling out pastry. Porcelain is easy to keep clean, but is clattery and hard on china that hits it with force. In fact, there seems to be no one ideal working surface.

The same might be said for floor coverings. Wood is absorbent, may splinter and become worn, but it is easy on the feet.

Linoleum is quiet, resilient. Since it is made of ground cork treated with oil and pressed into a burlap base, it stands to reason it is somewhat absorbent. If the pattern is printed on top, it wears off in time unless the surface is protected with a linoleum lacquer.

If possible, have the cove or rounded base to prevent a crack where wall joins flooring. Have the linoleum laid in a cement base. Never tack linoleum immediately upon laying it as it needs to stretch and adjust itself to the room.

Rubber tiling is quiet and soft on the feet, but needs care in cleaning. Clay tile is hard on the feet. Dishes that bounce down upon it never are the same again. Chefs like the red Welsh quarry tile for kitchens. Dishes are washed in another room, however.

Paint on wooden floors wears off under the constant wear such a floor receives. Of all the floor coverings it would seem that inlaid linoleum has the least number of disadvantages to weigh against the advantages.

Walls in the kitchen should be washable. Paint, paper, surfaced textiles, clay tile, glass tile, wallboard coated with heavy plastic, enamel on steel tile, meet that need.

Woodwork should be easily washable, for even in the cleanest of kitchens there is a film of grease which comes from daily cooking.

White woodwork is attractive but hard to keep clean. Gray, cream, and ivory seem more satisfactory. There is no reason why the woodwork should not be enameled in a jolly color, or if there is too much woodwork for that treatment, it might be finished with cream and then given a line or a glaze of color.

By all means there should be color in your kitchen workshop. When kitchens were gray and dingy, havens for cast-off furniture, "dark brown ambiguities", it was not to be wondered that women hated housework. But now a kitchen sings with color.

There are gay curtains at the window. The inside of cupboard doors, kitchen-table drawers, and work-desk drawers are radiant with color.

Smocks and aprons are every whit as gay as a summer garden filled with bloom. Some of this bloom comes into the kitchen too, for a pot of chives or parsley thrives on the window sill. A row of geraniums flourish on the sill over the sink.

The modern kitchen has pictures in it. Not marvelous ones, but colorful pictures. They may be magazine covers which have been passepartouted. They are hung where the tired eye may light on them. Pictures carry you out in the apple orchard, or into the daffodil beds, or down a winding lane.

One woman hung a picture in her kitchen, but she tired of it. When asked why, she said, "Well, I 'll tell you. The picture

came from a calendar. It represented an engine with steam up, going headlong down the track. That engine seemed to be driving me too, and every time I looked at it I grew tired, so I took it down." Don't have a picture that drives you to your work, but choose one that takes you pleasantly afield.

Kitchen work may be tiring, even when a locomotive with steam up is not leading you on.

That comes when work is not planned and management is lacking.

Plan to have a kitchen workshop desk which holds the telephone, the recipe books, menu pads, pencil, calendar, pen, small change, first-aid kit, powder, mirror, and possibly the radio and clock. The last two, being electric, are in the modern workshop. There may also be a desk chair made of chromium with washable upholstery.

Time and motion studies help to make work easier. How often do you handle a dish from the time you take it from the table until it is set back on the shelf? Do you know? Does dish-washing progress from left to right or right to left? Have you watched yourself?

When you pile dishes on the pantry shelf, how do you do it? Are the dinner plates in one pile, bread-and-butter plates in another, saucers in a third, soup dishes in a fourth, sauce dishes in a fifth, and cups in a sixth? Suppose there are three of you in a family. Why don't you keep one pile holding three dinner plates, three bread-and-butter plates, three saucers, three sauce dishes, and three cups in one pile. Then, when you set the table, one motion will bring all the necessary dishes to the table.

Consider an accessory shelf built halfway between two standard shelves. It is half as wide as the regular shelf. That half shelf gives space for setting piles of smaller dishes. You don't have to slide out a plate from under a heap of saucers, hoping that they won't come crashing as you do it.

Consider the storage of pots and pans. Could n't they be hung from hooks and racks so that you would n't have to break your back to get the kettle you want? For some perverse reason it is always the one at the bottom of the pile that you do want.

Consider the elimination of cupboard doors and the substitution

of curtains or glazed chintz attached to the rollers used as roller shades.

Watch yourself to see how many unnecessary steps you take in a kitchen. Is the teakettle in one place, the tea caddy in another, the teapot in a third, and the teaspoon which measures the tea in a fourth? Why walk all around the kitchen to assemble four articles that belong together?

A woman kept her sugar in a little room off the dining room which adjoined the kitchen. A guest was helping her cook and after walking through the kitchen into the dining room, through the dining room and into the small room to get the sugar, said, "Why do you keep the sugar in such an out-of-the-way place?" The woman answered, "Why, five years ago the ants got into the sugar and we had to move it in there. I never moved it back." Five years of walking through three rooms instead of investing in an ant-proof container!

Watch your steps. Let your head save your heels. Study your motions and see where you can cut down on energy by doing things a simpler way. (See page 637.)

Count the number of times you peel apples or potatoes when they could be cooked with skins on. Does the saving in time overbalance any waste or fingers burned while trying to peel the hot potatoes?

Come to a conclusion as to whether you believe it is necessary to wash dishes three times a day. What is gained? A spotless kitchen; a feeling of a job well done; a satisfaction in having finished what you started? Do these outweigh the backache saved by omitting one dishwashing per day? Or the good time you could have had if you had been willing to put the dishes to soak and let them wait until you were preparing another meal and found yourself standing around with chinks of time at your disposal while you waited for the potatoes to boil?

Consider the utensils you buy and the gadgets you select.

If utensils are to prove satisfactory, they need to be able to pay their rent, be easy to keep clean and in order.

We speak of labor-saving equipment, but it is impossible to say that any one piece is always labor-saving, because what is labor-saving for you may be work-entailing for me.

For example, when a mayonnaise mixer is intricate in construction, hard to clean, and seldom used, it is not a labor-saving utensil. But a mayonnaise mixer in another home where mayonnaise is served daily may be a great help.

A device for shelling peas has so seasonal a use that it is questionable whether it can pay its rent in the home where fresh peas are used for a month or two only. But in another home with a garden and many fresh green pods it is indeed a labor-saver.

Think through your own family's needs before you buy equipment, but don't be swayed by the argument that your mother and her mother never used any such utensil and therefore you won't either.

It is wise to seek new gadgets which will make kitchen work easier. A gadget is a novelty of to-day which becomes an accepted utensil of to-morrow. Originally a spoon was a gadget. So was a fork.

There was a time when a cog eggbeater was a gadget. Fork tines had been used before that.

Can openers, bottle openers, tongs for handling hot foods, measuring cups with projecting handle on side, measuring spoons with graded bowls, olive prong, ice shavers, and apple corers are modern gadgets that make the kitchen a better equipped workshop.

Rubber scrapers that clean soiled plates, that push out the last spoon of batter; spatulas with flexible blades, and metal skewers are other gadgets or workshop tools.

Keep an alert and open mind on this question of new equipment. Study advertisements and editorial matter in the magazines.

Look in the houseware departments when you are in shops. Read, study, keep your eyes open and your mind a questioning one. Then your kitchen becomes more than a place where you cook and wash dishes. It becomes a testing laboratory, an experimental station, a workshop of a modern well-informed individual who changes "will you walk into my parlor" to "will you walk into my kitchen, 'tis the smartest little kitchen that ever you did spy."

UNIT 3. LAUNDERING[1]

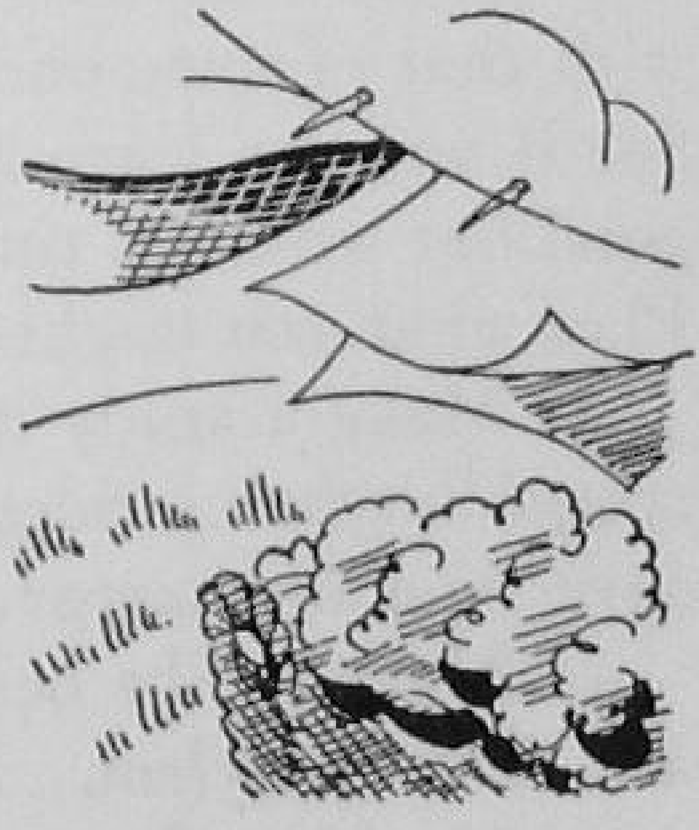
When women used to wash clothes on Monday, they were following a work pattern which was accepted and said in effect, "Put the clothes to soak on Sunday evening. Washing is hard work, so plan it for Monday, which should see you rested after Sunday."

Sunday, presumably, was a day of rest. But restive children, heavy meals, and father at home to be irritated by the children usually combined to make the day anything but restful.

However, the electric washing machine has taken the drudgery out of wash day, so we may still set aside Monday as the day when the laundering is done. Different machines call for different procedures. Before you decry a new method, give it a fair chance. Don't try to adapt your old ways to new machines.

There is a basic pattern in laundering as there is in any cleaning activity. Here it is:

Spots are removed and soil is loosened by soaking in soft water.



Soil is then removed by agitation in soapy water.

Rinsing in two or three waters of lukewarm temperature washes away loosened soil. Cold water hardens the soapy curd.

Bluing may be used to whiten the clothes. When thorough washing in a machine and drying in the sun is possible, there is less need for bluing to counteract yellow traces and tinges.

After drying, the clothes are dampened, allowed to mellow for a few hours, then smoothed by ironer or by iron.

Such is the pattern process of laundering. But, as said before, the method of removing soil and excess water is largely a matter of the kind of machine you have.

For directions for drying and ironing clothes see pages 644–46.

[1] "Where Do You Wash?" and "All about Laundering" are the titles of two informative booklets prepared by *McCall's Magazine* to summarize the results of experimental work carried on at the University of Nebraska.

CLASS ACTIVITIES

1. Tabulate the home-making jobs under the headings given below, listing the time required for each job. Secure this information from your mother or a neighbor.

HOME-MAKING JOBS

DAILY	TIME REQUIRED	WEEKLY	TIME REQUIRED	SEASONAL	TIME REQUIRED

2. If possible, experiment to find out how long it will take you to do several of these daily and weekly jobs. Compare your time with that of some one else who performed the same piece of work. See if you can learn any short cuts, so that your result will be as good but with less time and fewer motions required to do the job. Plan what you might do with the time you saved.

3. Make a study of the arrangement of the equipment in the school kitchen. Suggest any rearrangement that would seem to save time and energy.

4. Measure the height of the working surfaces in both school and home kitchen. How do these heights compare with those considered best by authorities on equipment?

5. Experiment with different methods of laundering various kinds of materials.

6. Suggested home projects:

Keeping household accounts for a given period of time
Planning and carrying out a schedule for household tasks
Assuming care of various rooms of the house
Doing one's own laundry
Doing the family laundry
Storing clothing for the summer

TEST: Your Knowledge of the Keeping of a Room Clean

Directions: Copy the following outline on a sheet of paper. To test your knowledge fill in the outline, checking in the second column the processes you would use in cleaning each part of the room, listing in the third column the equipment you might use, and in the last column stating the cleansing agent you would use. For example, if the wall were papered, it would need an occasional dusting with a soft brush — no cleansing agent would be needed. For seasonal cleaning, wall-paper cleaner might be used.

PART OF ROOM OR EQUIPMENT TO BE CLEANED	PROCESSES USED FREQUENTLY AND OCCASIONALLY IN CLEANING	EQUIPMENT TO BE USED IN CLEANING	CLEANSING AGENTS TO BE USED
Walls	Sweeping Dusting Washing		
1. Papered		Soft brush	No cleansing agent. For seasonal cleaning, wall-paper cleaner
2. Painted			
3. Rough plaster			
4. Tile			
5. Sanitas			
Floors			
1. Varnished			
2. Painted			
3. Waxed			
Woodwork			
1. Varnished			
2. Enameled			
3. Stained			
Furniture			
1. Varnished			
2. Waxed			
3. Painted			
4. Covered with fabric			
Carpets or rugs			
1. Allover carpet			
2. Large rugs			
3. Small rugs			
Windows			

Note: Supply any surfaces to be cleaned which you might have to clean at home. Omit any with which you are not familiar.

TEST: Your Information Concerning the Family Laundry

Can you do the family or your own personal laundry? Describe in a few phrases the processes in laundering and give the reason for each. If you would omit any of the processes or change their order, give your reasons.

STEPS IN LAUNDERING	DESCRIBE PROCESS	GIVE REASONS FOR STEP
1. Stain removal . . .		
2. Sorting		
3. Soak soiled pieces .		
4. Washing in suds . .		
5. Boiling		
6. Rinsing		
7. Bluing		
8. Starching		
9. Drying		
10. Ironing		

THE WELL-MANAGED HOME

Books to Be Used as References

Adams, Charlotte, *The Run of the House*, The Macmillan Company, New York

Ahern, Eleanor, *The New Washday*, M. Barrows and Company, New York

Balderston, Lydia R., *Housewifery* (Revised), J. B. Lippincott Company, Philadelphia

Balderston, Lydia R., *Housekeeping Workbook, How to Do It*, J. B. Lippincott Company, Philadelphia

Calvert, Maude R., and Smith, Leila B., *Advanced Course in Homemaking*, Turner E. Smith Company, Atlanta, Georgia

Craig, Hazel T., *Consumer Buying*, D. C. Heath and Company, Boston

Donham, Agnes, *Marketing and Housework Manual*, Little, Brown and Company, Boston

Gross, I. H., and Lewis, Mary E., *Home Management*, F. S. Crofts and Company, New York

Harris, Florence La Ganke, *Everywoman's Complete Guide to Homemaking*, Little, Brown and Company, Boston

Lynde, Carleton John, *Everyday Physics*, The Macmillan Company, New York

Matthews, Mary L., *The House and Its Care* (Revised), D. C. Heath and Company, Boston

Peet, Louise, and Sater, Lenore, *Household Equipment*, John Wiley and Sons, New York

Quennell, M., and C. H. B., *History of Everyday Things in England*, Volume III, Charles Scribner's Sons, New York

Trilling, Mabel, and Nicholas, Florence, *The Girl and Her Home*, Houghton Mifflin Company, Boston

Wood, M. W., Lindquist, R., and Studley, I., *Managing the Home*, Houghton Mifflin Company, Boston

Woodin, J. C., *Home Mechanics for Girls*, McCormick-Mathers Company, Wichita, Kansas

Wright, Helen C., *Sunset's Household Handbook*, Lane Publishing Company, San Francisco

Other References

Bulletins from extension services of state universities such as:

- "Making Cleaning Easy," Extension Circular 212, South Dakota State College, Brookings
- "Letter from a Homemaker to a Friend on Housecleaning," Bulletin 262, Cornell Bulletin for Homemakers, Ithaca, New York
- "Use of Time by Oregon Farm Homemakers," Bulletin 256, Oregon State Agricultural College, Corvallis, Oregon
- "Are You Buying a Washing Machine?" Bulletin 178, Agricultural Extension Service, Ohio State University, Columbus

Pamphlets and bulletins from commercial concerns such as:

- "Where Do You Wash?" *McCall's Magazine*, New York
- "All About Laundering," *McCall's Magazine*, New York
- "Soaps and Other Cleansing Agents," Household Finance Corporation, Chicago
- "Laundry," Procter and Gamble, Cincinnati
- "Home Laundering," Westinghouse Electric Manufacturing Company, Mansfield, Ohio

VI. THE WELL-CARED-FOR CHILD

UNIT 1. THE MANAGEMENT OF CHILDREN

Did you have to bribe that young brother of yours to stay away from the house on the Sunday night you planned to invite guests for supper?

And does that small sister of yours nearly drive you mad because she wants to go with you everywhere you go?

Are n't brothers and sisters a nuisance? Now wait a minute before you answer that. What about the time Johnny went to the store for you and saved you the trip? And how about the time when Annie said, "That 's all right, I 'll wipe dishes for you so you can go to the movies"? A nuisance? I wonder.

Think how sorry you feel for Marie because she is an only child — no brother to bring her home from the party, no sister to giggle with her over the funny way George's hair curls, no sister or brother to share Christmas secrets, nobody to help pick out a birthday present for Mother.

No, cross as we all get with our families we like them pretty well after all. Brother may tease the life out of you unmercifully, but he won't let "that gossip" down the street tell stories about you.

There is something binding in belonging to a family. Sister may "boss" you, but she tells her friends how bright you are, and what good marks you get in school.

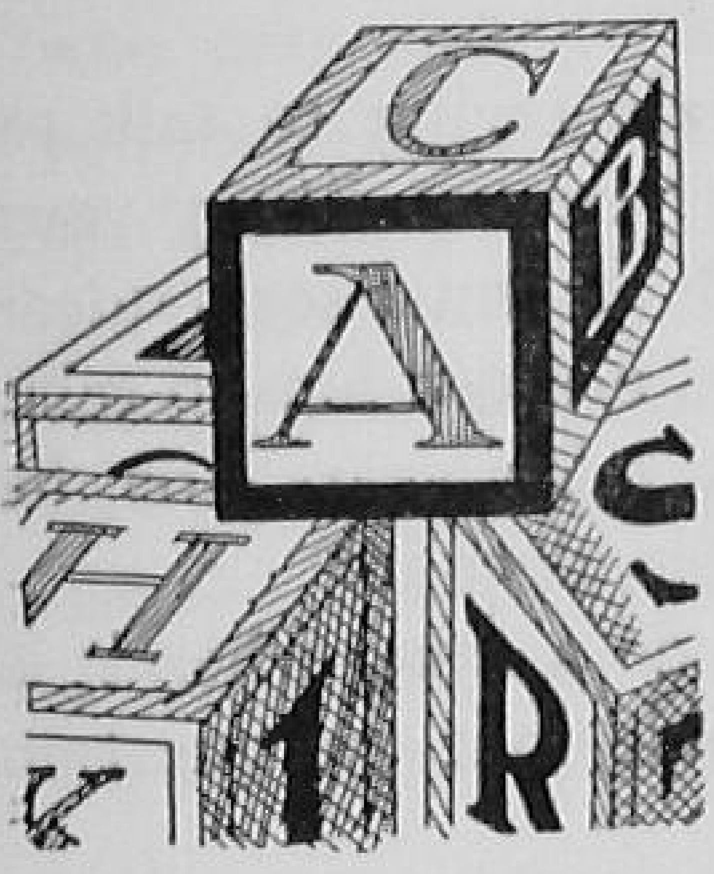
Let 's pretend that you have some brothers and sisters older and younger than yourself.

Which group is the harder to get along with — the youngsters or the ones older than you? Of course the older ones try to "boss" you around and you resent that. And the young ones won't mind you — that is, you say they won't mind you. You don't suppose you try to boss them, do you? Surely not, after the way you resent such treatment from that twenty-year-old sister or brother.

It is to be regretted, though, that we boss even as we are bossed. Big Sister lays down the law to us and we lay it down to the juniors. And big Sister says that Dad and Mother lay down the law to her and they say the city government lays down laws for them, and city governments say that their orders come from the state, and the state says it has to obey the national government, and so it goes. Apparently we all are under the rule of some one higher up.

Why do you get so wrathy when Sister does boss you? Is it because she is n't reasonable?

Do you suppose, being honest with yourself, you must admit that you are not always reasonable with that little toddler whom you call Brother? It is quite possible.



Let 's look at a few instances.

Mother and Dad have gone to a show. You are staying home with Jimmy. It is time for him to go to bed. He is building with his blocks. You look at the clock. "Jimmy, time for bed," you say, rather pleasantly, too. Jimmy does n't hear you. You wait a few minutes, then you say in a much sterner tone, "Jimmy, it 's time for bed. Did n't you hear Mom say before she went that you must obey me?" Jimmy grunts, but goes on building a high tower.

Such disrespect! The very idea! So up you get, grab Jimmy and pull him, protesting, to bed. He cries, you slap him, and a sorry time is had by all.

Suppose you had said, "Jimmy, what are you building? A tower? My, how high it is getting. Think you can build it any higher before it falls? Well, you try and when it falls over that 's because the blocks are getting tired and want to go to bed. And after we put them in their box then we 'll put you in bed." Perhaps it won't work. It usually does, however.

You commanded him to go to bed with no consideration or respect for what he was doing. "Aw gee," you say, "what was important about his building? It 's just play." Maybe so.

When you were finishing that game of parcheesi and your

twenty-two-year-old sister told you to set the table, you did n't stop. The game was almost finished and you were winning. So you played on and Sister grew cross and finally you cried and Mom scolded. You said under your breath, "Such a bossy sister! Thinks she can run me because she is older."

Makes a difference, does n't it, whether it is a game of building towers or of parcheesi?

When Jimmy began to talk, you taught him to say, "Mary had a little lamb." You are proud as Punch. When the boys come over, you say, "Come on, Jimmy, say your piece," and Jimmy says it and you try to act as if it were not something unusual to have such a smart brother. Smartness sort of runs in your family, does n't it?

And now, a year or so later, when you are trying to talk to Edgar and Jimmy pipes up with some story you say, "Stop your noise, Jimmy. We don't want to hear you." It must seem queer to Jimmy. First, grown-ups beg him to talk, beseech him to talk, implore him to talk. But when he does talk, a few years later, he is told to hush up. Does n't sound reasonable, does it?

No one resents being told to do or not to do a thing when it is reasonable. It 's when it sounds unreasonable that the question of "bossism" is raised.

It takes a great amount of self-control to be reasonable all the time. But it 's worth striving for.

Many girls earn money by staying with a neighbor's child of an evening, or by taking care of children after school and on Saturdays. That 's why it seems most important that you have some imagination and learn to be reasonable in your treatment of them.

It is not hard to have enough imagination to see why youngsters beg to stay up late or to have candy just before a meal, or even why the little child objects to brushing his teeth. You want to stay up late, you like to eat candy, and there are times when you sneak to bed without brushing your teeth.

But you know — because Mother and big Sister have told you often enough — that such things are not good for your health.

But why are n't they? Can you be reasonable in your refusals?

Before we answer that, suppose we talk about refusals for just a moment. Do you suppose Mother gets any real pleasure out of refusing you what you want? Do you suppose that Dad enjoys forbidding you to run the car? To answer that, let me ask you another question — do you get fun out of saying, "No," to the little child? Of course you don't. Mother hates to refuse you. So does Father. They do it because they know that granting the request might work you more harm than the refusal hurts them.

You would n't want the neighbor's boy to get sick from eating candy and have his mother refuse to employ you any more, would you? Of course not.

Refusals hurt the person who gives them as well as the person who gets them. So do punishments. When Mother punishes you and says sorrowfully, "This hurts me more than it does you," she 's telling the truth, honestly she is. But the hurt is to her spirit, not to her physical body. You see, you think of hurts as being physical affairs. It 's only as you get older that you learn a physical ache is as nothing to a spiritual or a mental one. You 'll learn. That 's the pity of it, that you 'll have to.

You think over that refusal business and see whether our reasoning does not make good sense.

Manners and Morals

Suppose you are taking care of a child and he disobeys. What are you going to do? Wiser heads than yours have puzzled over that question. Once the defiance stand has been taken it is hard to do anything. Suppose you make up your mind you won't get caught twice, then you will think before you make requests or demand obedience. You are going to take for granted that the order will be obeyed. It is amazing what a phrase will do. Instead of saying, "Do this," say, "Come on, let 's try this." Instead of saying, "Stop that, instantly," say, "Can you do this?" or "Come here, quickly, I want to show you something." Only be sure you have something to show.

When faced with open defiance, don't threaten punishment unless you can carry it out.

Have you ever watched a mother taking a child downtown to see Santa Claus? The visit is discussed ahead of time and made

to appear a great treat. Downtown the two go. The streets are crowded, things cost more than the mother thought they would, the child's arm gets tired. Just try holding your arm way above your head as a child has to do when mother grasps his hand. You 'll soon see how tired it gets. The child gets in an elevator, and is scared and cries, and Mother says, "Stop that, or I 'll put you out on the next floor and leave you," or, "If you don't stop I 'll call a policeman," or, "If you don't stop I 'll tell Santa Claus not to bring you a thing, not a thing." Does Mother mean any of those threats? Not one. Does she call a policeman? No. But she has made the child think of a policeman as a man to be feared, rather than as a helpful friend. Does Mother put the child out on the floor alone? No, she holds him tighter, but she has succeeded in making the child afraid of being in strange places. Does Santa Claus pass by this naughty boy? No, he is generous as always.

Or Mother says, when Johnny whines, "You are the most ungrateful child. Here I brought you downtown, spent all this money, and you do nothing but whine." Can you tell why he should be thankful for a trip in crowded shops, where he is buffeted about, where he sees many things he can't have, and where the trip ends in a spanking? Are n't grown-ups queer?

You 're not going to be that way, are you?

We find other faults with children. They sometimes lie, steal, and act shy.

Children lie because they have imagination, or because a lie does not seem a moral sin, or because they hope to escape punishment. Children steal because they lack things that other children have and are ashamed of the lack. They take what does n't belong to them because they have not learned the rule of "mine and thine." Children grow contrary because they are misunderstood and get tired. Children become suspicious because they have learned grown-ups don't keep their promises. Children are shy because they have been forced into social situations without warning or preparation. Children are cruel because they want to show their superiority to something. They have been an underdog for so long. Children become "smarty" because foolish adults have paraded them and praised them. They become self-conscious

because they overhear critical remarks about them. Children, in other words, change from cunning cuddly babies into what they are because of what adults do to them.

Many of these phases they outgrow. Children like to swear and say naughty words because it makes the grown-ups pay attention to them. When Jack says, "Yes, please," "No, thank you," "May I," he is taken for granted. But when he comes home with a nice round word which a big boy said, and when he repeats it, he finds himself the center of a drama. It 's exciting while it lasts, so when life gets monotonous he tries it again.

The trick in conquering that tendency to swear is this — ignore the words. Nothing is as deflating as being unnoticed. Try it, it works.

Of course there are children who have mental and moral twists. All the faults mentioned above have been "taken on" and later discarded by most of us. But there are children who don't discard them, but make them a part of the woof of their lives. Then they need remedial measures. It may be the psychiatrist, the lawyer, the physician, or surgeon who can work the cure. But that 's for older heads than ours to cope with.

There are many organizations formed for aiding children. Here are some of them: visiting nurse associations, tuberculosis associations, social welfare agencies, day nurseries, orphanages, juvenile courts, boards of health, state schools for deaf, blind, and feeble-minded.

The year 1933 saw the partial abolishment of child labor which had been a blot on our nation since it was founded.

"Civilization moves forward on the feet of little children," but those children's feet must be set in healthful, happy ways if civilization is to get ahead.

If you have a young charge or a young brother or sister who is healthy, energetic, agreeable, good-natured, and good-mannered, within reason, you may count yourself fortunate.

Children are so much fun and can be such good company that we ought to welcome them from their advent as infants through their chubby childhood and their lanky adolescence. And that brings them just up to about our age. And, of course, we know how nice we all are!

UNIT 2. PHYSICAL CARE OF CHILDREN

How old are the children you take care of — four, seven, eight?

What demands do we make of children? We demand that they be clean, and that they get enough rest.

What do you know about the physical needs of a young child and how do his needs differ from that of the mere infant?

A little baby may be classed as a young animal. He sleeps, exercises his lungs, moves some cramped legs or arms, gets hungry, makes his wants known in the only language he has — a cry. He is fed. He is warm, and dry, and comfortable, and goes to sleep again. That 's pretty much like a kitten, or puppy, or any other little animal.

We like to think that our baby brothers know us when they are a few weeks old. They don't really.

A proud young father said the morning after his first son was born, "You 'd be surprised how bright he is. Why, he took hold of my thumb and just would n't let go. He knew I belonged to him." Poor mistaken father! That infant no more knew his father than you know higher mathematics.

It would be nice to believe when queer little grimaces go over the baby's face that he is laughing at us. Perhaps, who knows, he is laughing because we are so gullible. But, truth to tell, that smile was nothing but an involuntary twitch of some facial muscles.

Cleanliness

Very young babies need special care. That rose-leaf skin needs the mildest of soap, the softest of wash cloths, the gentlest of temperatures of water. And a skin as soft as that needs a daily bath. So does your skin and mine, but I fear there are days when our tougher epidermis has to get along without a bath. Maybe that is one thing that has helped to make it tougher. That rosebud skin chafes when left wet, it chafes when rubbed with scratchy cloths or strong-smelling ones.

Babies can't use a handkerchief, but they do get the "snuffles", so the nurse uses small pledgets of soft cotton to clean the nostrils. She keeps these in a covered glass jar as nearly sterile as possible.

She washes the eyes with a boracic acid solution and she cuts tiny fingernails when they grow long and sharp.

In fact, she keeps this little bundle as fresh and dainty, as sweet-smelling as a pretty rose.

And what do you do with the four- or the five- or the eight-year-old? Is that active body as fresh and fragrant as a rose? Did you ever see hands or knees that could get grubby so fast? And is there any reason why this child does not need a daily bath as badly as the two-weeks-old infant? None at all. So we put daily bath on our list of requirements.

The new little baby gets clean clothes every day. The shirt worn during the day is changed for a fresh one at night. And yet that baby has n't played so hard that he perspired, has n't let mud slide down his arms. What about clean underclothes for the active child? If not clean ones daily, at least we can say, "Everything you are wearing during the day is taken off at night and hung up and aired. No, sir, there 's no sleeping in your underclothes."

Rest

Young babies are not the least bit interested in being taken calling nor are they interested in company that comes to see them. They are quite apt to be frightened. Here are great big creatures, strange of face, wearing queer things on their heads — hats, for instance — and queer things on their faces — glasses — who bellow, and make funny faces, and get cross when baby cries. Suppose the "big bad wolf" should shake his head at you, would n't you be scared? Or consider a hippopotamus making faces at you, or would n't the hippo have to change his face to frighten you? Babies should be left alone. They should not be taken calling. They should have a routine as fixed and firm as the coming of day and night. So many hours for waking and kicking, so many hours for sleeping, so many minutes for exercising the lungs. (That phrase sounds better than the word "crying.")

What about the four-, the five-, or the eight-year-old child? Should he be going places? Not after six o'clock at night. Should he be seeing visitors? Yes, because he must learn to adjust himself to strange people and to social conditions. But again, not after six o'clock.

Children of four and five usually adore company because company gives them a chance to show off. And all children love attention. "All children" is not the correct phrase — "all human beings" love attention. Even Dad likes to have you make a fuss over him. Poor dear, he works hard all day and then has to explain at night why there is n't more money for a car. Try playing up to him once in a while and showing him some appreciation. Mother likes to have you say nice things to her. She cooks, and works, and sews, and goes without things for herself so you may have them, and you say, "I don't see why I can't have a new dress. Angeline has one. All the girls have one. I 'm the only girl who has to wear made-over dresses." Now honestly, is that so?

But to get back to the five-year-olds. They eat up attention. They like to be the center of the stage and they are usually cute enough so they get what they want. It 's when one gets leggy at eight, and baby faces lose their roundness, and gaps in the front row of teeth loom large that children get shy and become a problem. Think back to yourself. Did you like to meet company when every one said, "Oh, look, she 's lost a tooth! Well, well, how does it feel?" Remembering how you felt, can't you be more understanding of the six-year-old sister?

It 's hard to go to bed when grown folks stay up, but if going to bed is taken as a matter of course, if no special allowances are made, ever, — then the early-to-bed rule stays in force. But when once you break over, when once you say, "Well, it 's your birthday to-night," or, "It 's Christmas night and I 'll let you stay up," then the fight is lost. You know the significance of special occasions but children don't. It 's just a night when they were able to put something over on you. And if it can be done once, it can be done again. You know all about that, because you 've worked your family and your teacher, have n't you? We all do it.

UNIT 3. THE WELL-BORN CHILD

Frequent references to the "well-born" child are made in lectures and literature.

What do you suppose is meant? Is a well-born child one who first sees daylight in a specialized and expensive hospital dealing with maternity cases? Is it an infant equipped with ten fingers, ten toes, one mouth and a rosebud nose? Is it a child born into a home where there is plenty of wealth?

These might be valid explanations but the phrase is used in another sense. That child is well-born who has a father and mother who are healthy, emotionally stable and much in love with one another. A well-born child is planned for in advance of his coming so that he is not an unwanted infant.

Other factors than those just mentioned have proved important enough in the child's heritage to be stated as foundation facts of being well born.

Intermarriage of cousins is fraught with certain dangers: Mary Black and John White are cousins. Their mothers are sisters. Both Mary and John have quick tempers (They may not call it that; they may say that being high strung is a family trait — just look at their mothers). Mary likes her cousin John. She likes William, too — only William seems a little slow and placid. He was a classmate of hers whom she grew to know and like.

Both men ask her to marry them. She finally selects John because — well, just because. When their daughter or son is born there is the chance that it may have inherited the nervous tensions of both its mother and its father. The child is under the handicap of a precariously balanced temper.

Had Mary married placid William and had they had a child, there is a good chance that the youngster would have been less high strung than the mother and less calm and easy-going than the father. There might have been a welding of the two characteristics so that the child was easier to get along with and more balanced.

When cousins marry there is always the chance that family traits will be intensified. Now that applies to good traits as well

as poor ones, of course, but unfortunately the bad ones are always more noticeable.

We know that tendencies to disease, but not diseases themselves, may be hereditary. Suppose that a girl has tuberculosis and suppose she is madly in love. It is the physician she should see before she and the man in the case think of applying for a wedding license. The physician of today is a sane and sensible counsellor whose advice should be taken. Only a selfish girl would marry knowing that any offspring might be started in life with the handicap of a tendency toward tuberculosis, let's say.

Certain states have laws which make health examinations for both the man and the girl obligatory, before ever they can marry. Such precautions make for "well-born" babies. Even if there are no state or local laws an intelligent and unselfish couple will have health examinations before they marry. Only the unintelligent girl is so selfish that she puts personal happiness above the right of her children to be "well born."

A girl sometimes is silly enough to decide she won't marry a boy because his hair stands up in a funny way or because he has a snub nose. (Funny! Most boys think a pert little snub nose is cute on a girl but a girl looks "down her nose" at the pug-nosed boy.) Superficial characteristics like that are not worth marriage refusals, but diseases of the soul — meanness, cruelty, dishonesty — are of so great importance that a girl should think a long time before she says "yes." By saying "yes" she may be dooming herself and her children-to-be to a life of misery.

A stranger may come to your town. He joins your crowd but is curiously reticent about himself and his family. He may not be the kind of boy to whom a girl should engage herself after a brief acquaintance. A girl ought to see, and be seen by, her fiancé's family before she walks up to the altar with the man. Perhaps the boy has false pride and is ashamed of his parents. Beware such a person! He is just as apt to be ashamed of you some time and hurt you deeply!

Boys with fascinating pasts are apt to develop hateful and shabby presents and futures.

The modern world understands that there are times when it is more decent and honorable to break up a home than to continue

to live with hatred. But, before marrying a divorced person, one should think long and prayerfully. Is there the probability of the incompatibility being repeated in the new marriage? It need not be, and probably won't be, but due consideration should be given to "It happened before. Am I willing to work hard at making marriage a success so it will not happen again?"

Certainly the cad who makes love to a girl while he still is married to another woman deserves as little consideration as the heartless chit who is not satisfied with the devotion and financial security given her by her husband, and poaches on another's preserves. A child from such a union can scarcely be said to be "well born."

When a man and wife are living in so poor a shelter that it is wholly inadequate, when there is not enough money for food or for clothing, it seems preposterous to think that a child born into such a home can be well born. Not all the mother love in the world, not all the fatherly devotion in the universe can make up to the child for its entrance into a home where there is not adequate shelter, food and clothing. The child is handicapped from the start. Mother love is not enough. It would have been so much more intelligent, so less dumb-animal-like if the coming of the child had been delayed until things were better financially and until the mother was in better physical condition.

We repeat, a child is well born when both parents are healthy, emotionally stable, and have timed or spaced the coming of the children so that each child has a chance for a well-developed and nourished body and a home where love abides.

Does every well-born child develop into a worthwhile person? If not, why not? This brings us to the question of the relative importance of heredity and environment. Let's make it personal.

What do you suppose is contributing most to making you a worthwhile person? The qualities you inherited from your parents or the environment in which you are being brought up? That question is scarcely a fair one to put to you since no conclusive answer has ever been given. And how people have argued over it!

A few years ago a child-training institution (a Normal Child Development Clinic) was granted permission to take a pair of identical twins and, for the purpose of studying influence of heredity *versus* environment, to train the two differently. (Iden-

tical twins are developed from one single ovum, which means that their heredity is identical.) It was decided to surround them in the Clinic with different environmental training.

The twins were Jimmy and Johnny Woods. Their training has been written up in magazines. They will continue to be the subject of much investigation.

Within a week or two after birth, they were taken to the Clinic. Each day the two were called for and returned to their home at night. Johnny was slightly the weaker of the two. He was picked out, therefore, for the special attention. Jimmy was allowed to develop as best he could. The plans called for an experimental period of two years. Then back to their home.

Johnny was trained in muscle coördination from the start. He was roller skating at the age of nineteen months! He was trained to be confident in his own ability to do things. He was taught some manners. At the age of two the twins' father is reported to have said that "Johnny ate like a gentleman and Jimmy like a 'mug.'"

They have been tested annually.

When they were seven years old it was found that Johnny was plumper and better developed than Jimmy. He had somewhat better muscular coördination. He had complete self-confidence, but had lost his ability to roller skate. That activity had not been carried on in the home after the children were returned.

Jimmy was full of life, had a winning way about him and is reported to have said that school was swell, while Johnny, the trained twin, reported that he hated school.

The suggestion has been made that Jimmy was given the breaks by his parents. They felt that Johnny was getting all the attention in the Clinic and that they had to make up to Jimmy for it in some way. Jimmy had learned, apparently, that he could get what he wanted by smiles and by good nature. Johnny took what he wanted because of his self-confidence.

The results of the experiment are still being studied and doubtless you will find further conclusions recorded within the next few years.

Childless parents hesitate to adopt a child because they say, "We don't know what the father and mother were like. Perhaps

this child will disgrace us in later years." There is that chance, of course, but it is not only adopted children who have disgraced their parents. The fear of disgrace seems unsupported in view of the many adopted children who have repaid their foster parents a hundred fold.

If a growing girl is surrounded by a bad environment and still stays "good" she deserves more praise than the girl who stays "good" in a sheltered environment. Perhaps we are all agreed that given the will to do so, a person can usually rise above environment. We must agree, too, that when given the will to do so, a person can sink below the level of environment.

How often have you said to yourself, "Nobody appreciates what I do." Has it occurred to you that other people may feel the same way? If you miss appreciation why not practice the golden rule and "do as you would be done by"?

No one knows how a bit of praise may help another person. When mother says, "My, but you did a grand job of polishing these tumblers. I never saw them so bright and shiny," you take special pains to shine them the next time.

When mother says, "Thank you so much for offering to go on that errand. I hated to ask you," you are definitely ready to offer on another occasion.

When mother says, "That was fine of you to be so honest. Not everyone would have shouldered the blame the way you did," you square your shoulders and glow inside.

An occasional word of appreciation may swing one's impulses toward the right and away from the left. Who can say what part environment has played?

And who can say when heredity is the deciding factor?

"In the mud and slime of things, something always, always sings." Another poem comes to mind —

> "Out of the night that covers me
> Black as the pit from pole to pole,
> I thank whatever gods may be
> For my unconquerable soul."

Heredity, environment — or what?

UNIT 4. THE GROWING CHILD — HIS CLOTHING AND ACTIVITIES

The Halle Play Plan[1]

The Halle Play Plan is designed for the use of grown-ups who have a genuine respect for the rights and privileges of childhood.

Birth to Nine Months. The very small child is an interesting "guest" in the home, whose happiness and comfort depend upon its clothing and nursery equipment.

Most modern authorities suggest that the old-fashioned binder be discarded after the baby leaves the hospital.

Many mothers make the mistake of getting bands that do not have length enough to protect the child's abdomen. Bands should always come down to the diaper without being strained.

Why do some doctors object to the all-wool shirt? The modern infant must have clothes that are easily adjusted to varying temperatures. Better several layers than too much warmth in one garment.

Pillows are not advisable for small babies.

Why does oil take precedence over powder for infants? The massaging of oil into the skin furnishes a certain amount of exercise.

LAYETTE CLOTHING	EQUIPMENT
Shirts, silk, cotton, or silk and wool	Baby carriage
Bands, cotton, silk and wool	Chifforobe
Gowns, knitted or flannelette	Screen
Hose of cotton, silk, or silk and wool	Crib or bassinet
Kimonos, flannelette or wool	Pillows and cases
Wrapping blankets, cotton or wool	Cotton felt or hair mattress
Dresses, slips, and gertrudes	Bath toys, water balls
Diapers and safety pins	Soft animals
Baby gays, ear conformers	Hot-water bottle
	Rubber dolls
	Glass containers
	Photograph album and record book
	Celluloid or silver rattle
	Silver cup

[1] Copyright, 1932, by The Halle Bros. Co. Fifth edition, June, 1938

FOR COMFORTABLE SLEEPING

- Rubber sheets
- Quilted pads, large and small
- Cotton sheets
- Cotton or wool blanket
- Clamped fastener to hold covers in place with side fasteners
- Sleeping rugs or bags with crib spread

FOR TRAVEL

- Paper diapers
- Auto baskets
- Bootees, sacques, sweaters, and hood shawls

FOR THE BATH

- Dressing table with canvas top
- Combination rubber bath and dressing table
- Knit wash cloths and towels
- Castile soap, olive oil, powder
- Bath thermometer, hose, and spray
- Sterilator and bottle outfits, nipples, bottle caps
- Diaper pail
- Toilet trainer and commodes
- Hose and shirt frames
- Beam scales

The first six months is a most critical period, when the child needs the best of clothing and equipment.

Diapers for new-born babies are eighteen by thirty-six inches. The tubular diapers are recommended. For the older infant the diapers are twenty-seven by twenty-seven inches. The diaper may be folded into thirds lengthwise and then crosswise. This is recommended especially for baby girls. Folding the diaper in cone or kite fashion is recommended for baby boys. The lengthwise folding uses two safety pins at each side. This method avoids bundling between legs. The cone-folding is held by two safety pins where widest points of cone encircle body and meet the narrow point of cone brought up between the legs.

Nine Months to One and One-half Years. Although children do not all grow and develop alike, the average child during this period has learned to say one or two words and associate them with persons or objects; is walking and running. He is no longer an infant but starts his development as a child.

It is natural for a child to investigate. Give him his own corner. A play pen provides him with freedom of movement, a place for toys within reach, something by which he can pull himself up to his feet.

During this period the child pulls himself up to a standing position. He will take his first step and in preparing him for this, his first-step shoes have been designed to provide a firm sole and soft, comfortable uppers. A moccasin would not be enough.

Get him used to a cup for milk, even before he is weaned. Begin teaching him to hold it at a very early age.

It is far easier to teach him to handle his own spoon if you give him a small, straight spoon, a miniature of a grown-up's, rather than one with a crooked handle.

Even at this age it is not too early to provide him with his own linens. Keep a small wash cloth and towel handy in both kitchen and bathroom.

Even at an early age orderliness may be taught. Provide hooks identified with colored pictures for toilet articles, others for apparel; a special drawer, shelf, or box for toys. These provisions will save many steps for the child's guardian and encourage an admirable habit in the child.

CLOTHING AND EQUIPMENT

Creepers
Knit suits
Sweaters and berets
Coats and bonnets
Feeding bibs
Sun suits
Overalls
Slide-fastener play suits for winter
Soft-sole shoes
First-step shoes
Galoshes
Leggings
Dresses
Hosiery
Bathrobe

Training pants
Underwaists
Garters
Toothbrushes
Hairbrush and comb
Costumer and hangers
Low table and chairs
Dishes and spoon
Individual pitcher
Play pen and pads
Screened outdoor bed
Spreads and bedding for cribs or beds
High chair and pads
Nursery chair

For learning to balance and walk give him: Pull toys, rubber-tired walker, soft animals

For learning to grasp:	Large wooden beads (vegetable dyed), soft toys
For learning to follow sounds:	Bell-rollers
For manual and sensory development:	Bath toys, linenette books with simple large pictures of familiar objects

One and One-half to Three Years. Through play even the small child learns a great deal, and he becomes skillful in the use of his muscles. Give him toys that call upon him to use new combinations of movements. Playing with a bean bag or a game of ring-toss teaches him to throw accurately; stringing large beads teaches another kind of skill; drawing on a blackboard another.

If a child's suit is n't well-cut and generously proportioned, especially in the body length, he cannot bend over and reach for things comfortably. The buttons will pop off and the suit will tear out.

Why are there four buttons across the back of many play suits or of underwear, instead of three? It is easier for the child to reach them than to fasten one central button.

In learning to put on his own stockings, he should have the kind that have plenty of elasticity around the top so it is n't so much of a job to get his feet into them.

Encourage the child to feed himself, as early as he can hold and manipulate a spoon. Serve his food attractively and in small helpings. Pretty dishes, table covers, and bibs help to make mealtimes pleasant.

Great care should be taken to brush teeth thoroughly and regularly, so that the habit will be formed early.

A child's sleep will be disturbed by the parents' late hours if he shares their bedroom. Give him a separate bed in a separate room as soon after birth as possible.

A good sand box will keep the child playing happily in the sunshine if he has some little pails, a shovel, and simple molds for making things.

This is the age of discovery. The child is curious to touch things, to feel them, to pull them apart, to put them together, to begin to help take care of himself. New daily schedules are arranged.

This is a habit-forming period that must be intelligently and understandingly observed by the parent.

During this period the child is beginning to learn to dress himself. Self-help is the most important keynote of modern child training.

A sleeper suit in which there are feet should be amply long. Otherwise the child will be uncomfortable when he bends his knees or draws his feet up.

Long garters may be attached to reënforced pieces on the sides of the waists or winter-weight union suits. A supporter for side garters is desirable, hanging from the shoulders, bringing the pull close to the neck.

Drawers, bloomers, or shorts must be ample in the seat, should have a deep, wide crotch, and not be too tight at the knee. If elastic bands are used, new elastic must be put in often; otherwise the garment will be a source of annoyance to the child.

The little fellow of two years who carefully builds a castle of small blocks on the living-room floor has a right to be indignant if it tumbles down when father walks through the room. Give the small children large blocks that have stability and avoid such accidents.

It is foolish to worry about toys that are too heavy for the two-year-old. Often large blocks and toys with weight will help him to build muscle.

The Age of Random Experimentation. The child of this age needs large equipment to push and pull and climb upon. He is interested in manipulating materials, always active, likes to take things apart and put them together. He is learning self-help.

Equipment:	Furnishings for a separate bedroom; shelving for books and toys; simple washable hangings and curtains; low table and chairs
Physical development and active outdoor play:	Sand box and sand toys, play pool and water toys, pedal cars, dump trucks
Pushing and pulling toys:	Blocks that lock, autos, wheelbarrows

Self-reliance and ingenuity:	Tinker toys
Imitative play, helpfulness:	Unbreakable dishes, sweepers, stoves, housekeeping toys, as brush, mop, dust pan, farmyard animals, dolls and doll carriage, arks and animals
Manipulative and creative play:	Wooden and nested blocks, peg carts and peg boards, large crayons and paper blackboard, pounding board, stick and rocking horses, jumbo nursery beads
Books and music; use of voice, and development of musical ear; memorizing:	Panorama and line picture books, nursery songs, simple realistic stories, Mother Goose, books with a voice, toy pianos and instruments

Three to Four Years. During this period he would enjoy his own little separate table and chair, one of a sturdy kind that does not tip and which enables him to put his feet on the floor. He may feed himself, pour milk from his own pitcher.

Slide fasteners have proven a tremendous aid in the campaign for self-help.

If the neck-size of a heavy coat is too large, the wind will blow a chilly breeze inside the child's clothing.

Here 's a good safe suggestion for deciding the length of stockings for a growing child. Be sure the length of the stocking measures three-quarters of an inch longer than the child's foot, *after* the stocking is washed.

Don't expect the child to tell you if a shoe is well-fitted. For growing feet, close-fitting heels and plenty of toe room is necessary. Consult some one who knows.

Did you ever think why underwear seams on well-made garments are flat? Ridges would irritate the skin.

If you 're buying paint sets, be sure to get the kind that will wash out of children's clothing.

It is natural for a child to want to scribble. Give him a blackboard or crayons and paper, and you may spare your wallpaper.

For physical development and active outdoor play:	Slides, tents, lawn swings, lawn showers, play pools, velocipedes and wagons, balls, and ten pin games, cardboard stores or houses
For imitative play:	Wooden farm sets and arks, cooking sets and stoves, doll bassinets and clothes, telephones, usable tools, costumes for play, solid maple table and chairs
For manipulative and creative play; mental development; knowledge of colors and association of ideas:	Papers to cut out, puzzles, hammer and nail sets, plain wooden building blocks, large color blocks, water paints, plasticine and modeling clay, blunt scissors, paper, and paste
For self-amusement, quiet play:	Soap bubble sets, blackboard, drawing books and crayons, chests of drawers for playthings
Books — with pictures for quiet amusement; others for reading aloud:	Animal stories, nursery rhymes, simple poetry
Memorizing; sense of rhythm:	Music boxes and instruments, phonograph and children's records

Four to Five Years. A little boy or girl may really suffer if his clothing is too different from that of his playmates and makes him conspicuous. He must "fit in."

To avoid making a little girl feel "all legs" as she grows up in her clothes, make sure there are deep hems in her dresses, easy to let down.

As long as a little girl must carry a handkerchief and learn to use it, give her a pocket where she can keep it. If not in the dress, in the bloomers.

The boy of this age may not have hips of the kind that will hold the first separate straight trousers easily. Look to that inside band on which there are buttonholes for attaching the trousers to the blouse. See that it is strong, and buttonholes well made. One-piece knit underwear, without buttons, may be had in summer and winter weights.

Many mothers give too little serious thought to play suits. The play suit must stand severe tests of wear and strain, must wash easily, and must have plenty of room for the child's most strenuous exercising. As this activity heats the body, the dyes of the fabric should not come off and harm the child's skin. Most better play suits are perspiration-proof.

Toys that imitate household equipment of the mother are tremendously interesting to little girls. But toy sweepers should sweep and toy stoves should cook. The child may begin to experience the joy of achievement at a very early age.

It is quite natural for a boy to want to build. Your good furniture will not be experimented on nearly so much if you furnish a boy of this age with an interesting hammer and nail set, or even a work bench.

This is the beginning of the age of motivated play, purposeful construction, and interest in imaginative and dramatic play. Divergence of interests between boys and girls comes at this age.

For physical development and active outdoor play; self-confidence developed; permitted to play alone:	Sand boxes and sand toys, slides, see-saws, gym sets, ball-bearing roller skates, velocipedes, wagons, tents, croquet, tennis, ring-toss
Dramatic and imitative play; joy of achievement that results from building:	Circus sets, gardening sets large steel toys, mechanical boats, autos, etc., hammer and nail sets, typewriters

For imitating responsibilities of older people:	Doll houses and furniture, composition dolls, tea sets, sweepers, stoves, telephones, puzzles, telegraph and conductor games, change makers, instructive cut-outs
For constructive and creative play: *For appreciation of color:*	Wooden blocks, picture lotto, modeling clay, bead stringing, paints, crayons, and paper, blackboard, chalk, eraser, scissors and colored cut-outs, ark, animals, farm yard sets
To increase interest in rhythm, music, memorizing; books:	Music boxes and instruments, phonographs and records, simple stories and poetry about familiar objects, people, and animals

Added equipment for the playroom should include pictures. At this period the child appreciates owning his own furniture, a place to keep his toys and books, and a place where he may play.

Five to Six Years. An extension of the interests of the previous age, with great strides in better co-ordination of muscles, appreciation of color, line, and form, and power of holding attention to one thing. As the child's body is larger, the toys with which he learns to play may be smaller in scale. The child takes great pride in achieving results.

Some children never do feel as though their clothes belonged to them. They are either wearing out the clothes they have outgrown, or growing into the sizes that have been bought too large for them. Modern students of child psychology tell us that the child has the same feeling of pride in clothes that grown-ups have.

Many little boys and girls are dressed as their mothers would like to see them rather than for their own comfort and satisfaction. "Little Lord Fauntleroy" is out of date.

The six-year-old boy is too young for older boys' knickers. When he asks for them instead of his wash suits, give him short wool trousers which are better than those of cotton, for he will probably play games at school in which he has to sit on the floor.

Both boys and girls like the simple navy "regulation" coat — because it looks well and feels good. And the mothers like it because it does not violate the laws of good taste and simplicity for children's dress.

Why should a little girl have her own sewing box? She will experience a pride of possession, joy in achievement, and encouragement in developing skill.

In selecting a book for a child to read himself, try to find out how much has been read to him — lest you choose a book too young for his mentality.

At this age there are new experiences that take the child out of the home, where he will meet other children and come under the supervision of adults other than parents. His horizon is enlarged, his world a place of greater adjustment than he has heretofore known. Many new types of toys, books, and equipment will be demanded as the child's curiosity is aroused by the possessions of his playmates. The following suggestions will be helpful to child and parent:

For physical development and active outdoor play:	Baseball bats, balls, gloves, roller skates and stilts, steam rollers and shovels, trucks, autos, and boats, soldiers, forts, aëroplanes, marbles, jacks, skipping ropes
For imitative play:	Cash registers, typewriters, cardboard stores, scales, doll houses and carriages, wardrobe trunks for dolls, dolls, breakable, unbreakable, glass dishes, electric stoves, housekeeping equipment, wooden dolls dressed in paper cut-outs

For constructive play:	*See suggestions in four-to-five-year group and add:* Felt cut-outs, weaving sets, pencil boxes, jack straws, real tools and work place, peg boards with smaller pegs, more intricate puzzles, blocks of varied shapes, lincoln logs, basket making, construction sets, transfer books
Games:	Ring-toss, tennis, croquet, fish pond, card games, tiddledy winks, picture lotto, games that supplement school work, cut-outs, puzzles
Books and music:	Fairy stories, adventure stories, simple poetry and music

UNIT 5. THE GROWING CHILD—HIS FOOD

When you are taking care of the younger members of your family, or when you are employed by some mother to take care of children, you need to watch your face, your expression, your words, and your table manners.

Children think that you are a model. They like to pattern their own actions on what the model does and says. If you sneak candy and eat it between meals, the children are going to try to do it too. If you turn up your nose at green vegetables, their noses will go up just like yours. If you make a face over cod-liver oil, they will make a face and a fuss too. You 'll have to watch yourself.

Another caution you need to observe is that of keeping children's meals simple. When a child is two years old, some mothers think that all need for dietary caution may now be relaxed. They give the child anything that happens to be on the table. They give it tastes of strange foods just to see what kind of a funny face the

youngster will make. But every taste of a strange food or a highly-seasoned one makes the child less willing to stay on a simple diet. When he does n't know the sweetness of sugar, the zest of broiled meat, the tang of a green olive, he remains quite content to eat his bread and milk. Let 's list the foods for the varying ages.

One and One-half to Two. From one and one-half years up through two years the youngster has a diet of milk, zwieback or day-old bread, well-cooked cereal put through a sieve, well-cooked green vegetables and fruits put through a sieve likewise. He gets one egg yolk a day or a little liver which has been steamed and chopped finely. He has one quart of milk each day, about one-quarter cup of orange juice or tomato juice, one teaspoon of cod-liver oil. He may also have about two tablespoons of baked potato, mashed to a pulp but not enriched with butter. Butter is still unknown in his dietary. That richness comes later. His daily meals, counting cod-liver oil at nine o'clock, are five in number — a meal at seven, one at nine, one at twelve, crackers and milk at three, and a light supper at five-thirty. He has received about one thousand calories, or approximately forty calories for each pound he weighs. Four protein calories per pound ought to be supplied. Milk gives protein and calcium.

Two to Four. From two to four years of age he gets about twelve hundred calories, or approximately thirty-seven for each pound of body weight. The protein calories remain the same in number. Calcium, phosphorus and iron are needed.

His meals are still five in number with one teaspoon of cod-liver oil and some orange juice at nine, and crackers and one cup of milk at three.

Breakfast is at seven, dinner at twelve, and supper at five-thirty.

He gets prune pulp, apple sauce, or mashed ripe bananas for breakfast, in place of the orange or tomato juice which is transferred to the nine o'clock in the morning "brunch." His cereal is well cooked, but not strained. He has a whole egg, mashed potato, vegetable purée, and he graduates in the dessert line to custard, junket, or plain cereal puddings. Cereal and milk, or bread and milk and fruit, well cooked and sieved, is served at supper. One quart of milk is still distributed through the day.

Four to Six. From four to six years of age, he needs about fifteen hundred calories daily. He still gets four protein calories per pound per day. He is growing rapidly and finds a need for this amount. Calcium is still emphasized.

His meals are four in number. The mid-afternoon lunch is omitted, but many a child is so hungry when he comes home from school that he feels he must have some food. Bread spread with butter and sugar is not satisfactory. Nor is candy. An apple or an orange may be quite enough for the "all gone" feeling of the late afternoon. He still has an early supper, which accounts for the light lunch at four.

For breakfast he has cooked fruit, well-cooked cereal, toast which is buttered, and milk to drink as well as to put on his cereal.

At ten-thirty he has crackers and milk.

At twelve he gets a meal consisting of egg, or lamb chop, or the white meat of chicken, or some chopped liver. He also has mashed potatoes, a green vegetable, a simple pudding, milk, and day-old bread.

For supper he has cream toast, bread and milk, or creamed vegetable on toast, cooked fruit or plain puddings, and simple cookies. There is bread, of course, and milk to drink.

Seven to Twelve. From seven to twelve the growing child gets about eighteen hundred calories per day, or anywhere from thirty to thirty-five calories per pound of body weight.

His meals are three in number.

Breakfast includes fruit, well-cooked cereal, dry toast, butter to spread on the toast at the table, milk or mild cocoa to drink.

At noon he has potatoes or rice, egg, chicken, lamb chop, broiled fish, or bacon. There is a cooked green vegetable, bread, butter or jelly, a simple salad, and a simple dessert. The dessert may be bread pudding, custard, floating island, or vanilla ice cream. There is milk to drink. Thus he receives needed calcium.

At supper he has cream soup or scalloped vegetable, bread, butter, milk to drink, and a pudding or stewed fruit.

Notice the absence of pop corn, hot dogs, ice cream cones, soda water, pop, pickles, vinegar, pepper, rich bonbons, gravies, plum puddings, and pies.

Seedy fruits should not be given before the child is eight or thereabouts. Nuts are best omitted from the diet until that time, too.

Have you enough imagination to make eating simple foods good fun for the young child?

Have you ability to take simple foods as a matter of course and to enjoy them yourself? If so, you won't have any difficulty with the child entrusted to your care.

CLASS ACTIVITIES

1. While you are studying this unit, you may be interested in observing some individual child or group of children. Your teacher might arrange for you to go into a home where there is a little child, or you might go to a nursery school, kindergarten, or first grade. She will probably give you a list of things which she would like to have you watch for when you are making these visits.

2. You might assist the county nurse in weighing and measuring the children in the primary grades. The class might be interested in keeping a list of the undernourished children. You might like to prepare some meals for these children, or supplement their home meals by adding a mid-morning meal of milk and graham crackers.

3. If there is a school lunch in connection with your school, the class or some individuals may be interested in watching the trays of the younger children and supervising their choice. Some device as the "A" lunch card from the National Dairy Council may prove an incentive to these children to choose wisely.

4. Make some posters illustrating good foods for children, or proper clothing for either the pre-school or school child.

5. Make a child's garment. This may be for a younger brother or sister, for a young niece or nephew, or for some deserving child in your community. It may be either a new or a remodeled garment.

6. Some organization in your community, such as the Parent-Teacher's Association, may collect old clothing. The class might assist in cleaning these garments, altering them, repairing or remodeling them for needy children in the school.

7. Have an exhibit or style show so that others in the school and community may see your work. The audience will like to see these garments on real children.

8. The Red Cross or some Sunday-school class may furnish you with material with which to make a layette for the new baby of a needy mother.

9. Have some special reports given in class on the legislative movements for the betterment of children. A report might also be given as to the discussions of the Child Health and Protection Conference called by President Hoover.

10. You might assist some club such as a Lion's or Rotary Club in the repair of toys to be distributed to needy children at Christmas time.

11. As a class problem, make some toys from inexpensive or waste materials. Have an exhibit of these, telling for what child-age each is suitable.

12. While you are studying this unit or when you have completed it, you may be interested in taking care of a child of pre-school age as a project. You may be paid by a neighbor for this work or you may do it for your mother or sister. Your teacher will help you plan it.

13. If there are grade children attending the same school with you, the class might supervise the play of some of these groups, directing their games on the playground.

Check yourself when you supervise the play of children.

If you are directing games on the playground, do you

1. Give directions in such a way that the children understand them?

2. Plan games in which the child shall take the initiative and you remain in the background?

3. Take into consideration the interests and abilities of the children when you choose the games?

If you are caring for a child for pay, or caring for a younger brother or sister, do you

1. Let the child choose what he shall play with?

2. Interrupt the child's play only when absolutely necessary for the day's routine?

3. Give the child warning of this interruption so he will be prepared for it?

4. Sometimes provide quiet times for the child?

5. Choose pictures, stories, and songs which the child can understand and enjoy?

6. Have the child put away his own toys (with help perhaps)?

TEST: Application of the Principles of Child Management

Directions: On the left are listed some general principles of management of children by grown-ups. On the right are listed some situations in which these principles were considered. Read through the situation and decide which principle was applied in this case. On a sheet of paper write the letters *A* to *G*, these letters representing the situations given below. Place the number of the principle applying to the situation in the space at the right of the letter corresponding to that situation.

PRINCIPLES

1. Grown-ups should be reasonable with children
2. Discipline should be consistent
3. One parent should not question in front of the child the decision of the other parent
4. The parent or grown-up refuses a privilege to a child when it is for the good of the child
5. All children love attention
6. The child tends to imitate the actions of those around him
7. All routine activities such as eating and sleeping should be practiced regularly

SITUATIONS

A. Mother was very careful to speak slowly and distinctly so that Mary understood her. Mary seldom disobeyed her

B. Elizabeth knew that her mother would always punish her if she was impudent to her. She soon learned not to be impudent

C. Robert was very careful to say "Thank you." He knew Mother always looked pleased when she heard him say it. He seemed to appreciate his mother's approval

PRINCIPLES

8. Make all suggestions in a positive form, rather than negative
9. Don't threaten punishment unless it can be carried out
10. In giving directions to a child, grown-ups should speak slowly and in simple sentences

SITUATIONS

D. Martha liked milk especially well. Her younger sister was not so fond of it but drank it willingly when she saw Martha drinking hers as if she enjoyed it

E. Mother was very sorry to refuse to take Wilma down town with her. She knew that the trip would be too long and tiresome

F. If Thomas were punished by mother for some misdemeanor, he knew that Dad would not sympathize but say that Mother was right

G. Mother gave the twins their lunch every day at twelve o'clock, even though their father was often late and she waited to eat with him. Then they had their naps at the same time every day

TEST: Your Knowledge of Necessary Character Traits

Tell which of the following character traits are of major importance in a child's development:

(*a*) Sociability
(*b*) Obedience
(*c*) Tact
(*d*) Honesty
(*e*) Sincerity
(*f*) Congeniality
(*g*) Self-control
(*h*) Service
(*i*) Orderliness
(*j*) Consideration for others
(*k*) Ambition
(*l*) Perseverance
(*m*) Wit
(*n*) Self-reliance
(*o*) Pleasantness

Write out your answers and bring them to class.

TEST: Your Ability to Recognize a Well Child

Directions: Make an outline like the following. Fill it in with phrases describing the appearance or condition of the well child.

PHYSICAL CHARACTERISTIC	DESCRIPTION IF CHILD IS IN GOOD HEALTH
1. Hair	
2. Eyes	
3. Breathing	
4. Teeth	
5. Skin	
6. Weight	
7. Expression of face . . .	
8. Appetite	
9. Activity	
10. Sleep	

TEST: Your Knowledge of the Factors Underlying Children's Acceptance of Food

Directions: In the right-hand column are some problems which can best be solved by applying one of the principles underlying children's acceptance of food. Read the description of the problem, then find in the column on the left the principles which you think should be applied in this situation. Thus in problem *a*, factor 2 would be applied to its solution. Write the letters *a* to *e* on a sheet of paper. In the space following these letters write the number or numbers of the factors which might apply in the solution of these problems.

FACTORS UNDERLYING CHILDREN'S ACCEPTANCE OF FOOD

1. A child will like foods which are attractively served and cooked
2. Children should eat at regular times
3. If meal times are treated as enjoyable feasts, the appetite is improved

PROBLEMS

a. Mary Jo's mother let her have cookies and pies whenever she baked. Mary Jo was underweight and ate only a small amount of vegetables at the table. Her mother worried because Mary Jo did n't eat more at the table.

4. The wise mother assumes that the child will eat what is set before him, encouraging him, not coaxing
5. When the grown-up eats cheerfully and willingly, he sets a good example
6. Giving children small portions of a new food is a good rule
7. Do not urge a tired or excited child to eat

b. Bob's sister prepared the meals. She tried very hard to make them good and let Bob help set the table with pretty colored napkins and some flowers. Bob always seemed to enjoy his meals.

c. Jane's grandmother never had a bit of trouble with Jane's appetite. She ate everything and grandmother said very little. One day she did suggest that Jane taste the cottage cheese. Jane seemed to like it.

d. In the Smith family there were Mother and Dad, the Twins, and Frances, fifteen. At meal time the five-year-old twins had a few things to tell about. Dad told all the funny things that happened at the office. Frances told about high school doings. There was little indigestion in that family.

e. Eighteen-year-old Jim had been at camp and learned to eat everything. Mother did n't have a bit of difficulty with ten-year-old Sam.

TEST: Your Knowledge of Sources of Suitable Information Concerning Children

Answer the following questions:

1. If your older sister asked you where to get good material for expectant mothers, where would you suggest that she get it?
2. If she also wanted material about child training, what would you suggest?
3. If you wished to buy Christmas gifts for some children, where would you find out what gifts would be suitable?

UNIT 6. PARTIES FOR CHILDREN

Going to give a children's party? Want to know how to make it a success? Here are the essentials:

First, invite children of approximately the same ages. Just because your sister of six has a cousin who is two and another who is ten, you are under no necessity of inviting them to the party. What pleases a child of six bores a ten-year-old and passes beyond the understanding of a child of two. They have no community of interests. Children of two or three or four should n't go to parties anyway. At least, not elaborate affairs designed to outdo the party given for the little girl next door. Most children's parties offer grown-ups an excuse to show off rather than to give a group of children the kind of time they like.

Second, send invitations through the mail, for children of party age adore getting letters. They feel so grown-up and important when the postman has something for them.

Third, state definitely the hour when the party starts and when it closes. And don't try to keep young children for more than two hours. There are times when even you find it hard to wear party manners for a whole afternoon; why expect the impossible from a child who has not learned self-restraint?

Fourth, adapt your entertainment to the age of the group and don't make your plans too elaborate.

Alternate a noisy active game with a quiet one. Don't give prizes — there is plenty of time for heart burnings in later years.

Have favors, but have them alike. Children like to have some tangible evidence of the party to take home to show their families. But that favor can be of the simplest. It is only in later years that the money value of a favor outweighs its sentiment.

Fifth, do home decorating but keep the scheme simple. Too elaborate and intricate decorations irritate children.

Sixth, remember that no party really is a party until the ice cream is brought in. For children under eight it is wise to serve a simple supper which will take the place of an evening meal at home. When ice cream and cake and candy is served at five o'clock, it is quite hopeless to expect a child to go home at six and eat sensible spinach and baked potato. Suppose you served creamed chicken in mashed-potato nests, sandwiches of bread and butter and shredded lettuce, plain ice cream, simple cup cakes and cocoa with fluffy marshmallow on top. That meal will not upset a child and makes an adequate substitute for the family supper at home.

Seventh, don't expect the child to show gratitude to you for all the work, bother, and expense entailed in giving the party. Children are n't built that way. Better not to make the party elaborate, not to be a nervous and physical wreck yourself, not to flatten the pocketbook to the point where it reproaches you. Then if the child shows little appreciation, you won't mind it so much.

Eighth, remember that hospitality is a trait to be fostered in a child and that she adores having a party, but she loses some of that joy when tempers and scoldings are the inevitable aftermath. A party can be a joyous affair even the day after if you plan wisely.

Favors from the Kitchen

"What a lot of amusing animals you can make from fruits and vegetables! For an elephant, take a lemon or a brown sweet potato and put on a string bean for a trunk, two matches for tusks. For ears, cut into the potato in the shape of ears and outline in green vegetable coloring matter. Use cloves for eyes and cinnamon sticks for legs and cinnamon bark for the tail.

"To make a turtle, take a flat little onion and stick in almonds (shelled) for legs and a clove for a tail!

"A purple sweet potato, skinned and dyed with vegetable

coloring, with a piece for a head, match-stick legs, and painted eyes, makes a crow.

"It takes a squash to make a rooster. Leave on the bit of stem at the top for its comb and color it red with vegetable coloring matter. Use cinnamon bark for a beak, cloves for eyes, and wooden skewers for legs.

"For a porcupine, rough up the fibers of a small coconut shell for the spines. Paste on paper eyes. Use wooden skewer or medical-swab legs.

"For a turkey, take a melon, pumpkin, or citron and run around at the back a fringe of toothpicks with cut-paper lemonade straws over them. Use a Brazil nut for the head and stick it in a place in the melon cut out for it. Paste red paper over the lower end of the nut for the beak. Pipe cleaners stuck into the melon or pumpkin or citron will hold the nut head in place, and will represent eyes. Use cranberries for the wattles.

"You can make a crazy loose-jointed peanut pair by sewing legs and arms at the joints with string and by painting features in black ink. Dress one like a man, and the other like a girl, using crêpe paper for clothes. Their little dog can have pipe-cleaner legs, ears, and a tail — and don't forget a ribbon around his neck! He has inked eyes and is stuck on a gumdrop to hold him in his place.

"Two ripe figs make a debonair devil. Stick two pipe cleaners into his head for horns and paste on a red-paper-dot mouth, and white-paper-ring eyes. Stand him on a paper doily; tie a red ribbon around his neck.

"You can make a realistic scarecrow with a dried peach or apricot head, with raisins for the mouth and eyes, and shredded crêpe-paper hair, and body, arms, and legs made of wire wrapped in tan crêpe paper, shredded at the ends for the hands and feet.

"Make a Mammy fortune teller, using a prune or a raisin for her head, and dressing her in a cloth shawl and skirt. Write a fortune on paper and place it under her skirt — and she'll stand up!

"The Santa Claus has an apple for his body and a marshmallow head. His arms and legs are toothpicks strung with raisins; cloves for his eyes and the buttons over his fat tummy. Paint his marshmallow cheeks with vegetable coloring; drape tufts of white

cotton for his whiskers and for the fur border of his red gumdrop hat.

"To make a merry little cannibal use a ripe fig for the head and string raisins on toothpicks for the legs and arms. Use grains of rice for eyes, cinnamon bark for the mouth, beads for his earrings, and about his fig body fasten a paper doily. Place in one 'hand' a medical-swab spear and fasten on its top a tuft of crêpe paper. For his feet use pieces of fig. He can look ferocious!

"The roots of a parsnip make the beard of Rip Van Winkle and his ears are of squash seeds. His body is a potato, too, with bamboo garden sticks wound around with gray darning cotton for legs. Make his suit of black or a figured-paper wrapping. His wife is made of a turnip, the leaf end representing an old-fashioned 'pug.' Squash seeds held in place with black-headed pins make her eyes, and her ears are crescent-shaped slices of carrot. Her eyeglasses and mouth are marked in with ink. Use bamboo garden sticks for her legs and cover them with a skirt made from a gayly-colored paper (left over from your Christmas wrappings). Use brown or gray paper to make her shawl."[1]

Christmas Animals

"**Elephants** are made from oranges, and ears are fashioned by carefully cutting sections with a sharp-pointed knife and peeling back the skin. Tail and trunk are fashioned in the same way, and to hold them all in shape very thin pieces of florist's wire are slipped under the skin, and the ears, tail, and trunk bent to the desired shape. The legs are long gumdrops, with small gumdrops on the bottom to form heavy, flat feet. These are attached to the body with toothpicks. Stick whole cloves in the head to serve as eyes, and toothpicks for tusks. And for a rakish finishing touch let your elephant balance a bright-colored gumdrop on his nose.

"**Dachshunds.** These are small bananas, sometimes called 'figans' or fig bananas. The head is a fig, and you can form it into amusing shapes by pinching. Cut out a mouth and insert a

[1] Copyright, 1932, The Curtis Publishing Co. Reprinted by courtesy of *Ladies' Home Journal*, Curtis Publishing Co

bit of red gumdrop for a tongue. Nose and eyes are made of whole cloves. For feet and tail, string small white raisins on toothpicks. Ears, made of bits of fig cut like long floppy ears, are attached to the head with short pieces of toothpicks.

"**Penguins.** Steam large prunes so that the pits can be easily removed, then stuff them with marshmallows. Pinch the prune somewhat as it dries to form the head. An effective head can also be made by fastening an extra small bit of prune on with a toothpick. Almonds form the amusing feet, and fins or hands are made of pistachio nuts.

"**Black Cats.** These are prunes, too, the largest and softest you can get. Legs and tail are made of currants strung on toothpicks or thin wire. The head is a round licorice with two gashes to make the ears, and you can paint the features on with thin frosting. You can add a fierce note with whiskers of broom straws.

"**Mickey Mouse.** Steam a large fat prune and stuff it with another pitted prune. This makes a pliable body, easy to shape. To hold in Mickey's waist line tie it with a heavy thread or thin string. Make the head of a whole fig, and cut a long, curved mouth. The ears will be small gumdrops, flattened, and small black currants form the eyes and tip of the nose. Mickey's arms and legs are currants strung on toothpicks and his feet are large, flat almonds shelled. Hands with fingers cut out can be made from flattened-out gumdrops. When the prune body has dried sufficiently, paint on his trousers with white frosting and put on the typical two buttons with small currants. The tail is a long, thin strip of licorice candy.

"**Minnie Mouse.** This lady is made practically the same way as Mickey Mouse, except that she gets a skirt of lemon peeling instead of trousers. Scallop the skirt around the edge with a sharp knife or kitchen scissors. Minnie's shoes are actually carved out of blanched almonds. It 's easy if you do it while the almond is still soft after blanching in hot water. You can even make real heels on the shoes. Her hat is one round gumdrop on top of a flattened one."[1]

[1] Reprinted by courtesy of McCall's Home Service

THE WELL-CARED-FOR CHILD

Books to Be Used as References

Anderson, H. H., *Children in the Family*, D. Appleton-Century Company, New York

Anderson, John E., *Happy Childhood*, D. Appleton-Century Company, New York

Bacmeister, R. W., *Caring for the Run-About Child*, E. P. Dutton and Company, New York

Bailey, Caroline E., *The Story Telling Hour*, Dodd, Mead and Company, New York

Baker, Traphagen, *Child Care and Development*, The Macmillan Company, New York

Bartlett, Frederic H., *Infants and Children, Their Feeding and Growth*, Farrar and Rinehart, New York

Brill, Alice C., and Youtz, Mary P., *Your Child and His Parents*, D. Appleton-Century Company, New York

Child Study Association, *Parents' Questions*, Harper and Brothers, New York

Cleveland, Elizabeth, *Training the Toddler*, J. B. Lippincott Company, Philadelphia

Coleman, S. N., *Creative Music for Children* (Series of several books on different types of music), G. P. Putnam, New York

Dagliesh, Alice, *First Experience with Literature*, Charles Scribner's Sons, New York

DeSchweinitz, Karl, *Growing Up* (Revised), The Macmillan Company, New York

Faegre, Marion L., and Anderson, John, *Child Care and Training* (Revised), University of Minnesota, Minneapolis

Foster, Josephine, *Busy Childhood*, D. Appleton-Century Company, New York

Garland, J., *The Youngest of the Family*, Harvard University Press, Cambridge, Massachusetts

Goodspeed, Helen C., and Johnson, Emma, *Care and Guidance of Children*, J. B. Lippincott Company, Philadelphia

Gruenberg, Sidney, *Parents, Children and Money*, The Viking Press, New York

Hurlock, Elizabeth B., *Modern Ways with Babies*, J. B. Lippincott Company, Philadelphia

Justin, Margaret, and Rust, Lucile, *Home Living*, J. B. Lippincott Company, Philadelphia

Kawin, Ethel, *The Wise Use of Toys*, University of Chicago Press, Chicago

Keliher, Alice, *Life and Growth*, D. Appleton-Century Company, New York

Kenyon, Josephine H., *Healthy Babies Are Happy Babies* (Revised), Little, Brown and Company, Boston

O'Donahue, Marie, *Child Care and Development*, D. C. Heath and Company, Boston

Richards, Laura E., *I Have a Song to Sing to You*, D. Appleton-Century Company, New York

Strain, Frances Bruce, *Being Born*, D. Appleton-Century Company, New York

Thom, D. A., *Normal Youth and Its Everyday Problems*, D. Appleton-Century Company, New York

Trilling, Mabel, and Nicholas, Florence W., *The Girl and Her Home* (Revised), Houghton Mifflin Company, Boston

White House Conference on Child Health and Protection, *Growth and Development of the Child*, Part I. General Considerations. Report of the Committee on Growth and Development, Kenneth D. Blackfan, Chairman. D. Appleton-Century Company, New York

White House Conference on Child Health and Protection, *Appraisement of the Child*, I. Mental Status; II. Physical Status. Report of the Committee on Growth and Development, Kenneth D. Blackfan, Chairman. D. Appleton-Century Company, New York

White House Conference on Child Health and Protection, *Growth and Development of the Young Child*, Part III. Nutrition. Report of Committee on Growth and Development, Section I, Medical Service I.A. D. Appleton-Century Company, New York

Other References

Bulletins from state university extension service such as:
- "Helping the Child to Learn," Ohio State University, Columbus
- "Guiding Behavior of Children," Ohio State University, Columbus
- "Sharing Home Duties," Iowa State College, Ames

Bulletins from the Children's Bureau, Department of Labor, Washington, such as:
- "The Child from One to Six"
- "Are You Training Your Child to Be Happy?"
- "Good Posture in the Little Child"
- "Home Play and Play Equipment for the Pre-School Child"

Pamphlets from the Child Study Association of America, 509 West 121st Street, New York City; the National Committee for Mental Hygiene, 370 Seventh Avenue, New York City; State Departments of Health; the Playground Recreation Association of America, 315 Fourth Avenue, New York City; The American Child Health Association, 370 Seventh Avenue, New York City

VII. THE WELL-BEING OF THE INDIVIDUAL

GENERAL DISCUSSION

On the way to the Sunday supper at your house the guests may have passed a house with a cardboard sign tacked near the front door. It may have said "chicken pox." The group began to talk about the case shortly after they were seated before your fire.

Had you been living in some congested European city a hundred years ago you never would have seen a sign denoting the presence of a contagious disease.

That sign is a comparatively new development. It represents one phase of community health and the care that is taken to maintain it.

We may say that a chain is no stronger than its weakest link. But we can scarcely say that a community is no more healthful than its sickest member. While it is true that one person with a contagious disease may infect the whole community, it need not be true that he will. For communities have learned to protect the health of their members.

Not only have communities learned to safeguard their members, but members themselves have developed a certain immunity through continual exposure. A city person bred and brought up in the midst of a crowd has been exposed so many times to tuberculosis that, given normal health, his body has learned to throw off the infection. Bring into that same situation a person who has been brought up in an isolated spot and, even though he starts out healthy, he is apt to harbor tuberculosis germs that would find in him a flourishing spot for growth.

That America does not have scourges of yellow fever, typhoid, small pox, diphtheria is due to the fact that there are community health agencies.

When you marry and go to live in a new community, as you perchance will, familiarize yourself with the community health

agencies and take an active part in their work. Any up-to-date progressive person does that.

UNIT 1. THE DEVELOPMENT OF A COMMUNITY ATTITUDE TOWARD HEALTH

A city or town government may have any or all of these departments: sewage and garbage disposal, water, and public health with public-health nurses in charge. It may have trained people inspecting its milk, food, meat, and restaurants. It does inspecting of public buildings. It usually has a hospital for care of communicable diseases and a hospital for the mentally deranged.

Some communities are so enlightened as to have school nurses, clinics for sick and for well babies, stations for immunization against diphtheria and other communicable diseases, day nurseries for the care of children with employed mothers. Almost every town has a Red Cross center.

Street, safety, and traffic departments attend to another phase of the community health.

All of these were unknown, or practically so, one hundred years ago. The community of to-day does look after the health of its people.

When we come to "Clean-up Week", we become interested in something smaller than the community — the individual homes that make up that community.

A forward-looking community makes "Clean-up Week" dramatic and effective.

"Clean-up" may mean nothing more than cleaned back and front yards, houses and surrounding buildings painted, fire hazards removed.

In a larger sense, however, "clean-up" concerns itself with slum clearance. If a town has a group of dirty decaying buildings that harbor filth, rats, and foster unsanitary living conditions, that very place nullifies many of the community attempts toward health. And so the forward-looking community says, "Let's get rid of slums. It is too bad we ever allowed them to become what they are. But let's wipe them out."

The government has become interested in the movement. We have slum-clearance activities, supported in part by private capital

and in part by public funds, going on in many of the large cities. The movement is worth watching.

Even its staunchest adherents realize that the whole movement will defeat its own purpose if the work is not done as a unified part of town and city planning. They realize, too, that construction and management costs must be kept low enough to maintain rents at rates that the lower-paid workers can afford.

It is doubtful whether the lowest class ever can pay rent or exist without community aid. For them the "subsistence" housing may be one way out. But even so, we may be sure that the community will always have some families on its hands. Subsistence housing puts a family on a small parcel of land in a city suburb, and says, "Here is land — grow the food you need for your family."

The health of the schoolhouse is of vital importance in maintaining community health. To be a healthful spot and not a disease menace it is necessary that the heating, sanitation and waste disposal, water supply, drinking fountains, lunch room, drainage, playgrounds, and cleaning of the building be adequately considered.

The color of the walls, the placement of the seats in relation to window lighting, and the color of the blackboards affect the health of teachers and pupils. This is indirect health care, because only when incorrectly done is a strain imposed.

Then there is the question of health supervision of all workers in the school, particularly in the lunch rooms. The attitude that teachers take toward establishing habits of hand washing is important.

Routine health examinations and lessons in health and hygiene are accepted in most communities as one of the necessary activities of a school.

Habits of health are made to seem important or non-important by the attitudes of those in authority.

More than that, the school, being a common meeting ground for the younger members of the community, may become the focal point from which infections and communicable diseases spread or it may be the point at which such calamities are averted.

Good citizenship and sportsmanship is evident in the obedience to health laws. No child and no parent has a right to forget that in a community an individual cannot live to himself alone.

CLASS ACTIVITIES

1. Find out what agencies concerned with public health are at work in your community. What are the responsibilities of these agencies?

2. Have various members in the class report on some state law or state board of health regulation. Find out what local health ordinances are enforced.

3. The class might be interested in making a sanitary survey of your community. Divide the class into groups or committees to survey various sections and report to the class. Consider the following: drainage, sewage disposal, garbage disposal, mosquito-breeding places, fly-breeding places, conditions of streets and alleys (or barns and stables), water supply, domestic animals (how kept). Report these findings to the class. After report and discussion, make out a sanitary program to meet the needs of the community.

4. Work out a score card (or use one already made) to score the health conditions in your school. These will include (*a*) fire protection; (*b*) heating, lighting, and ventilating; (*c*) water supply; (*d*) plumbing and toilets; (*e*) methods used in cleaning; (*f*) seating; (*g*) adequate playground; (*h*) control of communicable diseases; (*i*) school nurse or physician; (*j*) school lunch; (*k*) health education. Decide what can be done to improve this score.

5. Type problems for class solution:

   a. Ruth has a cold. She wants to keep the persons around her from taking it. What precautions should she take and why?

   b. Jane's father is afraid that their well is contaminated. What will he have to do to determine whether this is true?

   c. Elizabeth, who lives on the farm, says her family are continually fighting flies. They use fly paper and poison but still seem to have as many as before. Where should she look for their breeding places? How can breeding be prevented?

   d. Many persons in our community do not believe in vaccination. What arguments might be effective in proving to them its value?

e. Martha's aunt, who went abroad this summer, was vaccinated against typhoid fever. Why?

f. There is a tuberculosis sanitarium in our county. There is a long waiting list of persons who wish to get in. Is there anything we can do to help fight this disease?

g. Our town needs a municipal water system. The bonds for this have been voted down several times. The question is to come up at the fall election. What can we do to increase public sentiment in favor of this issue?

h. There is a small stream of water running through our village. The banks are very unsightly with collections of refuse, tin cans, etc., scattered in many places. Some toilets drain into the stream. To whom should we report the condition so we can help in its improvement?

i. One of the grocery stores in our community is very careless about cleanliness in the care of food. Can we do anything about this?

6. Give reports in class on the work of some of the following: (*a*) Pasteur; (*b*) Koch; (*c*) Jenner; (*d*) Florence Nightingale; (*e*) Clara Barton; (*f*) Madame Curie; (*g*) Behring (diphtheria toxin); (*h*) Reed and George and their work on the prevention of yellow fever; (*i*) Banting (insulin).

UNIT 2. THE CONTRIBUTION OF THE HOUSE TO HEALTH

What can be said about the health of a house? When does a house help to keep its inhabitants healthy?

The house must offer a shelter from rain and snow and wind; a safe water supply; adequate sunlight; adequate air.

The house and its surroundings must contain sanitary arrangements that promote decency and provide freedom from infection.

The house must be adequately heated with enough moisture in the air to present healthful living conditions.

Shelter from wind, snow, rain is provided when the roof does not leak, the window panes are unbroken, the doors shut closely, and the walls are sound.

In city homes the sanitary squad of the city, with its disposal of

waste, garbage, refuse, takes these matters out of the hands of its citizens. But in the rural home the necessity for a water source which is not contaminated from sewage in its neighborhood and the adequate disposal of sewage is paramount.

Garbage seldom accumulates in the rural back yard, for the peelings and left-overs are fed to animals on the place.

The city dweller is taxed in money for the care taken of these matters. In the rural home the family itself is taxed in physical labor and eternal vigilance lest unsanitary conditions come to exist.

Sunlight is a gift which one might think was given without money or price, but such is not the case. In the congested city districts, in the tall office buildings, in the large apartment houses, there may be inside rooms that never see the sunshine. To get sunshine, which apparently is free to every one, it may be necessary to expend real money.

The same thing is true of air. Any one who has visited the crowded streets of a city's Ghetto on a hot summer night and seen babies trying to sleep on fire escapes perched high above the street, seen old folks gasping for breath as they sat on the steps of their small shops, realizes that fresh air and plenty of it is of value and of great price.

Manufacturing centers have had to struggle with another phase of fresh air. The smoke from thousands of chimneys has choked off the sunshine and filled the air with fine black particles. To prove that, it is only necessary to see the lung of an inhabitant of a smoky city. The lung is almost as black as coal. Smoke, dust, dirt, and grime settling all through the house is another danger. Not only is the air filled with dust, but in that dust there may be countless disease germs.

The one phase of a healthful house which is receiving most attention at the present time is the maintenance of correct temperature in moisture-laden air.

We used to believe that a warm, well-heated house kept us free from colds. We used to believe that plenty of cold air blowing in the bedrooms at night kept us well. We shuddered when we thought of the airless, stuffy rooms and built-in wall beds of some of the Europeans.

But our thought is changing. Now we say, it is not the tem-

perature of the air — warm by day and cold by night — that is as important as is the constant current of correctly humidified air. Humidification is a new word in house health. Air-conditioning is the term used. The public marveled at air-conditioning in exhibit buildings at the Chicago Exposition. Six years later they called it a necessity for buildings at the World's Fair in New York and the Exposition in San Francisco.

Briefly stated, the system is this — air which has been washed to make it clean, heated or cooled to make it comfortable, containing moisture to make it easy on body tissues, is circulated through the house.

When the house is air-conditioned, the heat is controlled by a thermostat and the moisture content is controlled by a humidostat.

One-room air-conditioners have yet to be proved practicable.

The system that works — and even such a one is still undergoing improvements — calls for a central heating plant, an air washer or filter, and a device for adding to the air the correct amount of moisture or removing the excess amount. The oxygen content must be watched, especially in public places.

A few years ago we grew exercised over the dry air in our homes. We were told that the air in the modern home on a winter's day was drier than that found in the midst of the Sahara Desert. Accordingly, we tried to add moisture. We put pans of water on radiators or registers, we hung little contraptions on the backs of radiators. We hoped that filling these daily would give enough moisture to the air so that it would no longer dry out the mucous membrane, and the furniture as well. But the small amount of water absorbed by the warm air was not nearly enough to be of any good. Accordingly, devices for air-conditioning all the air in the house are being worked out.

The base burner, Franklin stove, coal- or wood-burning range, open fireplace, radiant gas or electric heater all have or have had their place in house heating, but to-day we consider them adjuncts and accessories to the central heating.

In central heating we have one general source of heat. The heat generated is sent to all the rooms of the house. As a rule, it is conveyed there by pipes which lead from the source of heat.

To keep the transmitted heat from being diffused before it reaches the rooms, it is best to wrap the pipes with blankets of asbestos paper or other insulating and fireproof material.

The fuels used to furnish the heat may be wood, coal, gas, or oil. Each fuel has a type of burner or furnace which uses that particular fuel to the best advantage.

Once the heat has been created it is sent to the rooms in one of a number of different ways, depending upon the system installed.

First, we have hot air. The air which is heated by direct contact with the fire rises, travels through pipes, and reaches the rooms. It gets its ingress through registers. Hot-air heating has been the cheapest form of heating. The system may be used in a small house to advantage. As the house increases in size, the system proves inadequate unless a fan is installed which forces the hot air into the most distant parts of the house.

Heated air is dry, so to-day it is placed in contact with water. Being warm, the air absorbs much moisture. The circulation of the heated air is vastly improved when a set of registers is put into each room, one to distribute the hot air, the second one to return the cold air to the furnace. The return, or cold-air, register is best placed on the floor or close to an outside wall. In installing registers the boxing-in must be close, otherwise much heated air is lost before it reaches the room. Registers installed in the floor complicate the carpeting of a room.

The second method of conveying heat to the rooms is that of the hot-water system.

The fire in the furnace heats water in pipes surrounding the fire pit or in a connected boiler. The water is circulated through pipes which lead to radiators. As the water gives off its heat it is carried back down to the fire pit, there to be heated and to start its circulating again.

Hot-water heat is steady, rather gentle, and, while slow to form, is also slow to cool off. It is drying, however, since the water itself is confined within the radiator. Therefore, an auxiliary system must be installed to humidify the air.

Steam heat calls for a fire pit. The heat generated here changes water, in a connected boiler, to steam. The pressure is controlled by means of a pressure gauge. The steam is forced up through

the house and circulates in radiators. As the steam gives off its heat in the rooms it changes to water and is carried back down to the boiler, there to be made into steam again. Steam radiators can be smaller than hot-water radiators.

Steam heat is quicker to rise and quicker to fall than hot-water heat. It, too, needs an adjunct in the way of a humidifying apparatus if the air in the rooms is to be moist enough to be healthful.

Vapor heat calls for less steam since the pressure under which it is held is augmented. Vapor heat has all the virtues and faults of the steam-heating system.

Radiators have long been an eyesore to decorators and a bother to women when they wanted to curtain the windows. Properly placed, the radiators have been located on the outer walls of the rooms under windows.

The modern mode of radiator placement calls for concealment in the wall. Grills, which are quite ornamental, offer the only indication of the source of heat.

Radiator covers for the old-type room radiator have been made to shield the walls above them from currents of dusty air. But covers may be so constructed that they deflect or absorb too much heat.

Radiators painted with oil paints radiate more heat and look less conspicuous than the metallic painted ones.

But, without doubt, most of your worries with radiators will be eliminated in the "House of Your Heart's Desire", for the heat sources and moisture sources will be hidden behind ornamental grills set into the walls.

Much heat is lost in the ordinary house by poorly insulated walls. Up under the eaves in the attic, all around window and door casings heat seeps out in expensive amounts.

Modern housebuilding insulates all walls and second-floor ceilings. There are many brands of insulating boards. Blown-in insulation in the form of shredded asbestos "wool" is available. So are asbestos wool blankets, glass wool, and metal-coated papers.

Another modern method of keeping heat in and drafts out is weather stripping. It is placed on all doors and window frames. This is nothing new, but the materials used and the methods employed are modern and improved.

We know that flies are carriers of disease. A house planned to maintain and promote health is adequately screened. The screens may be built into the house, so that they roll up or down or disappear into the side walls. Here again we have modern methods of promoting health.

All modern methods of house health are inconspicuous, and add to the beauty and usefulness of the house. They are features which ought to be built in at the time the house is being constructed.

CLASS ACTIVITIES

1. Work out a score card for judging your own home from a sanitary standpoint. Score your own house. How could this score be improved?

2. Criticize or justify the statement that "the homemaker is responsible for the health of the family." To what extent is this true?

3. Show how cleanliness in the home might prevent the spread of communicable diseases to other members of the family. How will the following aid in prevention: (*a*) cleanliness in food preparation; (*b*) use of individual hand towels; (*c*) proper methods of dishwashing; (*d*) proper care of dish towels; (*e*) proper care of the bathroom; (*f*) good methods of sweeping and dusting.

4. Compare the advantages of a septic tank to those of a cesspool for sewage disposal.

5. List the advantages of various methods of heating the home from the standpoint of health.

6. Have a debate on the subject, "It is more healthful to live in the country than in the city."

UNIT 3. THE MAINTENANCE OF THE INDIVIDUAL'S HEALTH

The stress which the modern community puts upon health and the structure of the modern house in relation to health are as nothing if the individual does not consider her part in the picture.

It is a sad commentary that few of us are ever 100 per cent well. Few of us know what radiant or positive health means. We are content to go limping along being 50 per cent or 75 per

cent well, when we might get so much more fun out of life if only we felt better.

We seem to think that we are made to be ailing and "under-the-weather" a good share of our time.

In your hygiene classes you have doubtless considered certain aspects of health and first aid. You have learned to be as ashamed of having a cold as you would be of stealing.

The catchy cold which has been transmitted to you directly or indirectly might have been avoided had you been in better physical condition. The cold which is auto-infectious and comes because you are ready to "catch most anything" is nothing to be proud of.

You have learned the parts that unbalanced diet and fatigue play. You know the value of sunshine or the sunshine lamp, cod-liver oil, baking soda, salt, much water, bowel-movement regularity in making colds things of the past in your young life.

You should be afraid of colds because they may lead to sinus infections, influenza, pneumonia, tonsillitis, tuberculosis. You no longer say, "Oh, I have a cold. It 's just a cold though — that's all, but it does make me feel mean." Of course it does, and you should feel meaner to think that you ever let the cold catch up with you.

But all of this discussion belongs in the hygiene classes. In this chapter we are more concerned with home care of minor ailments. We need three things in this connection: first, the telephone number of the doctor; second, the ability to follow his directions given previous to his call at the house; and third, a sensibly-stocked medicine chest and a first-aid kit.

The doctor should be called in at once in case of an accident or shock.

You should know how to take a body temperature both by the mouth and the rectal method.

You should know the danger of giving cathartics when the patient complains of pain in the stomach. Many a case of appendicitis has been made fatal by the ill-advised use of a cathartic. Wait until the doctor comes to tell you what to do. Don't try to treat such cases yourself.

You still have plenty to do to satisfy your nursing instincts if

you take care of small scratches, bruises, burns, and foreign bodies in eyes, ears, and noses.

It is quite possible to be too solicitous over a convalescing person. Many an adult "enjoys poor health" because she learned, when a child, that she could obtain more attention when she was ailing than when she was well. In addition to that, she might have been handicapped by a mother who was a chronic worrier. At any sign of temperature, rash, ache, or pain the mother called in a doctor or worried audibly over her daughter's health.

Intelligent concern, ability to notice signs of illness, and insistence upon more rest, more sleep, less rich food, fewer movies, fewer parties, and less extracurricular activities usually ward off possible illnesses.

Too much deviation from normal living makes one susceptible to most diseases. There are advantages in being just a normal person with normal interests but with an uncommon lot of sense regarding the advantages of "positive" or "radiant" health.

The Home Medicine Chest

Every home should have a cabinet or box or chest which is out of reach of the children. In this chest are remedies to be used in the home. They may help to alleviate pain until the doctor arrives. Or they may be used in minor accidents where no doctor is required.

This medicine chest should not be too large, lest you be tempted to keep half-used bottles of medicines. Many medicines deteriorate on standing. Therefore it is wiser to throw away left-overs. The medicine chest should not be locked, but kept available for immediate use in emergencies.

In the medicine chest there should be:

1 medicine dropper
1 clinical thermometer
1 eye cup
6 ounces rubbing alcohol (for external use only)
2 ounces aromatic spirits of ammonia (small amount in water relieves faintness)
1 tube carbolated vaseline (external use for minor burns)

4 ounces boracic acid (This is dissolved in hot water and when cooled, used for eye wash. Use two and one-half teaspoonsful for one cup of water)
8-ounce bottle castor oil (Give one to two tablespoonsful for a dose)
2 ounces syrup of ipecac (Give to induce vomiting. Give one teaspoon, followed by warm water to drink)
½ ounce tincture of iodine (Get this in small amounts in bottles with glass stoppers. Iodine eats a cork and then the air evaporates the alcohol, making the remainder so strong it may cause burns and injure healthy tissue.)
1 ounce oil of cloves (For toothache)
1 set first-aid dressing (This comes ready prepared and is on sale at drug stores)

Minor Accidents and Ailments

At one time or another most of us get something in our eye. Few of us are so foolish as to "put beans up our noses", but we may swallow something which is quite foreign to our daily food.

In any case here are home treatments which may be of help until the doctor comes. Or when called, he may advise us to follow these rules.

Foreign bodies which have been swallowed need to have their rough edges covered. Mashed potatoes, bread, mashed squash, bread puddings, anything of that type which happens to be at hand should be given to our patient.

The purpose of this soft dense food is to cover the sharp edges while the food is in transit to the stomach. Then the case is reported to the doctor and he takes charge.

If some foreign body gets into the nostril, and can be seen, a pair of small forceps or tweezers may remove it. Care must be taken not to force the foreign material up into the nose.

Occasionally an insect flies into the ear. Drop a little oil into the ear and the insect's hours are numbered, for he is soon suffocated. Any other substances had best be removed by a doctor. Never, never use toothpicks, sharp hairpins, or orange-wood sticks to pry into an ear.

If the wind blows something into the eye, have the patient close his eye without rubbing it. The tears may wash the speck out.

Get a clean medicine dropper and wash out the eye with clean water or boracic acid solution.

Try pulling the upper lid down over the lower. If irritation still exists, try turning the lower lid down. Go gently so as not to disturb the eyeball. When the speck is removed, a little castor oil may ease the irritated spot.

If acid gets into the eye, wash the eye with baking soda in water. If an alkali, such as lye or lime, gets into the eye, flush the eye with a weak vinegar solution. But get to the doctor as soon as possible.

A boil is listed as a minor ailment, but a person afflicted with a boil does n't consider the ailment minor. He considers its presence a major calamity. Boils come from infection entering through a slight break or abrasion in the skin. Try applications of hot water to ease the pain, but consult a doctor.

Earache needs a doctor's attention. Try applications of cloths wrung out of hot water, or try a hot pad, or hot-water bottle. Then see a doctor.

Frostbite should be treated with frost, not with warmth. When the flesh looks white and feels numb, it has been frost bitten. Rub it with cold water. Avoid dirty snow which may break the skin. Inner stimulants of hot coffee or milk may be given while the outer part of the patient is being treated with cold.

Nosebleeding is not a pretty sight, nor a pleasant sensation. It may be due to an injury. If bleeding is slight, try plugging the nostril with a wad of clean cotton. If bleeding continues, call the doctor. He may tell you to put the patient in a chair, to loosen the collar, to have his head bent forward slightly. Then you apply cold cloths to the back of his neck.

When you have toothache, it is the dentist whom you call and not the doctor. He may advise you to put a bit of oil of cloves on clean cotton and apply it to the aching spot. Then he will make an appointment for you to visit him.

Sunburn has been fashionable of late, but in addition to being fashionable it may be disfiguring and painful. A mild case of sunburn may be alleviated by applying baking soda and water, or carbolated vaseline. These protect the tender skin from the air and help to nullify the pain. Sunburn may be dangerous. If it continues to hurt, see a doctor at once.

At the same time that you get sunburned you may get stung with an insect. For this apply ammonia and then cold compresses.

HEALTH CARD [1]

1.	Can you work and play without being more than naturally tired mentally or physically at bedtime?	40
2.	Are you rested when you get up in the morning?	40
3.	Is your appetite good for wholesome food?	30
4.	Do you sleep soundly?	30
5.	Do you enjoy mingling with other people?	30
6.	Have you confidence in yourself?	30
7.	Is your weight within 10 per cent below or 10 per cent above the average for your height and years?	40
8.	Does your posture indicate health and efficiency?	30
9.	Are your arches normal and are you free from pain in your feet and legs?	20
10.	Is your vision either normal or corrected by glasses?	20
11.	Can you hear ordinary conversation at 16 feet?	20
12.	Is your skin clear; color good?	20
13.	Are your teeth either sound or filled?	20
14.	Are you free from constantly recurring infections including colds? . .	40

HEALTH HABITS [1]

1.	Are you eating some dark bread daily?	20
2.	Do you drink 6 glasses of water every day?	30
3.	Do you average at least 8 hours' sleep every night?	30
4.	Do you eat sweets in moderation and only at the end of a meal? . .	30
5.	Do you eat only at mealtime? (Mid-afternoon and mid-morning nourishment for an underweight person may be excepted.)	10
6.	Do you eat 2 vegetables exclusive of potato every day?	20
7.	Is one of these an uncooked vegetable? (Celery, lettuce, cabbage, etc.)	20
8.	Do you eat fruit at least once a day?	20
9.	Do you eat one of the following every day? (Meat, milk, cheese, nuts, fish, egg)	20
10.	Do you take your meals regularly?	20
11.	Do you eat slowly?	20
12.	Do you take a full bath or shower every day?	10
13.	Do you clean your teeth *at least* twice a day?	10
14.	Do you have a bowel movement each day (without a cathartic)? . .	30
15.	Do you average at least an hour out-of-doors every day?	30
16.	Do you exercise vigorously at least a half hour every day (either outdoors or in)?	20
17.	Do you take at least ten hours each week for recreation, social activity, reading, etc. (in addition to the daily exercise)?	20
18.	Do you observe a relaxation period of from 10 to 20 minutes during each working day?	20
19.	Have you a vital and satisfying interest outside of your work? . . .	30
20.	Do you have your bedroom window open at night?	10
21.	During school or working hours, do you wear comfortable walking shoes?	40
22.	Do you have a thorough physical examination once a year?	50
23.	Does your dentist examine your teeth twice a year?	50
24.	If you have physical limitations, do you know them and live within them?	20
	Total Score	1000

Height . . . Actual Weight . . . Normal Weight . . .

[1] Reprinted through courtesy of Parent and Health Education Association, Cleveland, Ohio

For poison ivy wash the affected spot with soap and water. Then put pure grain alcohol on the spot. Later apply a dressing of baking soda in a cold-water solution. This may help to stop the itching. If the poisoning is severe, see a doctor.

The Invalid's Tray

When one is ill one is apt to be fussy. Trifles that would never disturb a well person become extremely irritating when one is lying in bed, able to do nothing but think.

Meal time is usually hailed as a welcome break in the monotony of the day, but when the food is tasted the invalid is quite apt to refuse it petulantly because it does not taste as he wants it to. The patient forgets that the difficulty is not with the food but with his own self. Parched mouths and lips, swollen throats, bad taste in the mouth will ruin the most delectable food.

But even so, food may be given a chance by being brought to the patient on an attractive tray.

Choose the size of the tray with care. Too small a one will make all the dishes jumbled. Too large a one will be heavy for the patient to manage. Plan on two or three trips to the bedroom if that will mean a prettier and easier-managed tray.

Be sure that the edges of the napkin or tray-cloth are not hanging over where they may be fumbled and caught, with an upset tray as a result.

Be equally sure the tray-cloth is spotless.

Choose pretty dishes, but not necessarily the most expensive and precious ones. You may be so afraid the patient will break one that your uneasiness will be transferred to him.

Be sure that the dishes and the glassware set on firm bases. Goblets have no place on a tray. Nor does a slim vase which topples over at the slightest jar. Better avoid the flower unless you have a low, squat vase and plenty of room on the tray.

Have no serving so large that the appetite, which is modest at best, is sated at the start.

Do not fill cups, glasses, or soup bowls so full that the contents are spilled in transit from the kitchen to the patient.

Try to have covers for dishes holding foods that should be served hot. Bring up cold foods at the time they are to be eaten, so they will not grow luke warm.

As the patient convalesces, you might tuck a surprise animal as suggested under "Parties for Children" or a small written joke or an interesting clipping on the tray. Keep an element of surprise in the trays.

Liquid Diet. The simplest diet which a doctor allows is the liquid diet. It may be nothing other than albumin drinks, thin gruels, fruit juices, broths, possibly tea or coffee. For nutriment, milk may be added. This may take the form of milk soups, malted milks. Eggnogs may be allowed.

Soft or Semi-liquid Diet. Soft-cooked eggs, milk, cereals, milk toast, tender chicken are added to the diet. This is merely a general statement and needs verification with the physician in charge of the case.

Light or Convalescent Diet. Milk, eggs, soft-cooked or raw, lamb chops, broiled bacon, chicken, broiled lamb chops, baked potatoes, an uncooked green salad, a cooked leafy green or yellow vegetable, custards, puddings with custard foundation, rice, tapioca, gelatin dishes, ice creams are usually found in the convalescent diet. The physician should be consulted.

Regular or House Diet. Here we have meals such as are served to the family with the omission of such foods as fried meats, corned beef, pork, heavy puddings, highly spiced dishes, pickles, hot relishes and sauces.

CLASS ACTIVITIES

1. List the characteristics of a healthy girl. Will all of these apply to any person?
2. Use the above score card to check health habits of individual members of the class. Each member of the class may score herself. Decide how these scores can be improved.
3. Give reasons for a periodic health examination.
4. List causes for faulty posture. Suggest ways that faulty posture of members of the class might be improved.

5. Dramatize the "Ode to Posture." Use a sheet with lights arranged so that the silhouettes of the actors will be shown.

6. Make posters showing good and bad types of shoes.

7. Demonstrate suitable exercises for various members of the family. List suitable games for high-school girls.

8. Discuss the question of sleep and rest for the girl of high-school age. Would any part of the body be injured by neglect of this phase of health?

9. List the kinds of baths one might take. What is the purpose of bathing; the effect on the skin? When and by whom may each type of bath be taken?

10. Review "Introducing Foods." Summarize in a paragraph your knowledge of the part food plays in the health game.

UNIT 4. SAFETY IN THE HOME

Don't for one minute think you are safer at home than on the streets. Statistics show that the greatest number of accidents occur in the home. Let's see how many you can name. You might do it by playing a modification of the game called "Guggenheim" or "Categories."

Take the word HOME. Break it up into its letters and place them as shown on the next page. Let "H" stand for "Husband," "O" for "Offspring" (that's you), "M" for "Mother," "E" for "Everybody."

Now take the letters in the word SAFETY. Space them as shown. See how many causes for accidents you can put in the space "S" across from "Husband." "Smoking," and not crushing out cigarette stubs, thereby setting fire to paper or surroundings; also "Shaving," if the razor with sharp blade is left around for children to pick up. Under "Offspring" put "Steps" cluttered with rubbers and galoshes; for "Mother," "Stepladders" carelessly adjusted, "Scissors" left around carelessly, also "Sewing" with a needle left lying around or stuck into a chair arm. For "Everybody" we have "Scatter rugs" on polished floors.

Now try to fill in the other spaces and see how many dangers there are in the home.

	S	A	F	E	T	Y
H	Smoking					
O						
M	Scissors					
E						

THE WELL-BEING OF THE INDIVIDUAL

Books to Be Used as References

American Red Cross, *Home Hygiene and Care of the Sick*, P. Blakiston and Son, Philadelphia

Andress, J. M., Aldinger, A. K., and Goldberger, I. H., *Health Essentials*, Ginn and Company, Boston

Blount, Ralph, *Health, Public and Personal*, Allyn and Bacon, Boston

Boylston, H. D., *Sue Barton: Student Nurse; Senior Nurse; Visiting Nurse; Rural Nurse*, Little, Brown and Company, Boston

Broadhurst, Jean, and Lerrigo, Marion, *Health Horizons*, Silver Burdett and Company, Newark

Burkard, W. E., Chambers, R. L., and Maroney, I. W., *Health and Human Welfare*, Lyons and Carnahan, Chicago

Clendening, Logan, *The Human Body*, Alfred A. Knopf, New York

Cooper, L. F., Barber, E. M., and Mitchell, H. S., *Nutrition in Health and Disease*, J. B. Lippincott Company, Philadelphia

Davis, Adele, *Optimum Health*, The Author, Los Angeles

DeKruif, Paul, *Microbe Hunters*, Harcourt, Brace and Company, New York

Deming, Dorothy, *Home Nursing*, D. C. Heath and Company, Boston

Hader, Berta and Elmer, *Stop, Look and Listen*, Longmans Green and Company, New York

Hertzler, A. E., *The Horse and Buggy Doctor*, Harper and Bros., New York

Hilliard, C. M., *Prevention of Disease in the Community*, McGraw-Hill Book Company, New York

Johnson, Ava, *Bacteriology of the Home*, Manual Arts Press, Peoria

Jordan, Helen M., Ziller, Louise, and Brown, John F., *Home and Family*, The Macmillan Company, New York

Justin, Margaret, and Rust, Lucile, *Home Living*, J. B. Lippincott Company, Philadelphia

Krueger, Walter W., *Fundamentals of Personal Hygiene*, W. B. Saunders Company, Philadelphia

Lippitt, Louisa, *Hygiene and Home Nursing*, The World Book Company, Yonkers, New York

National Health Series, Edited by the National Health Council, Funk and Wagnalls Company, New York: *Adolescence*, Maurice A. Bigelow; *How to Sleep and Rest Better*, D. A. Laird; *Exercise and Health*, J. F. Williams; *The Expectant Mother and Her Baby*, R. L. DeNormandie; *Taking Care of Your Heart*, T. S. Hart; *The Healthy Child*, H. L. K. Shaw; *The Common Cold*, W. G. Smillie; *The Common Health*, T. A. Tobey; *Know About Eyes*, P. Lewis

Olson, L., *Improvised Equipment in Home Care of the Sick*, W. B. Saunders Company, Philadelphia

Rathbone, J., Bacon, F. L., and Keene, C. H., *Foundations of Health*, Houghton Mifflin Company, Boston

Selbert, Norma, *Home Care of the Sick*, W. B. Saunders Company, Philadelphia

Shultz, Hazel, *Housing and the Home*, D. Appleton-Century Company, New York

Wheat, Frank M., and Fitzpatrick, Elizabeth, *Everyday Problems in Health*, American Book Company, New York

Williams, Jessie, *Healthful Living*, The Macmillan Company, New York

Other References

Bulletins from State Departments of Health such as:
"How a Girl Can Guard Her Health," Health Education Bulletin Number 127, Ohio Department of Health, Columbus

Bulletins from voluntary health organizations such as:
American Child Health Association, 450 Seventh Avenue, New York
American Medical Association, 535 North Dearborn Street, Chicago
National Tuberculosis Association, 370 Seventh Avenue, New York
National Safety Council, Chicago, Illinois

Bulletins from commercial organizations such as:
Metropolitan Life Insurance Company, New York
National Dairy Council, Washington, D. C.

VIII. THE WELL-BRED GIRL AND HER SOCIAL RELATIONSHIPS

DISCUSSION OF PERSONAL REGIMEN

Personal regimen is taught in most schools to-day. The unusual name describes the subject matter, for in this course you learn how to adjust yourself to living. That means you will talk about getting along with people, about dressing correctly for a given occasion, about personal cleanliness so you offend no one, about health of mind so you see things in their proper relationship, about manners which are the coin with which you pay your way socially.

Personal regimen cannot be divorced from you and the life you live. It is not something apart, but it is you — eating and sleeping, getting educated, living with people day after day. This Home Economics book has been based on you and your daily life. This means that the answers to most of the questions raised in a personal regimen course are found in these pages. You cannot divorce your discussion of clothing from the subject of the clothes you wear when you have guests for Sunday tea. Manners are needed when you entertain, so is the imagination which gives you the ability to get along with your family and guests. If you think of personal regimen in relation to proper clothes, turn to "The Well-Dressed Girl"; if you think of it in terms of a healthy body, turn to "The Well-Fed Family", of which you are a part; if you think of it in terms of manners, turn to "The Well-Bred Girl and Her Social Relationships."

Educational leaders talk learnedly about "the family and other relationships", but most of us know the subject under a different title. We call it "getting along with people."

We may be clean, honest, thrifty, orderly. We may know about foods and nutrition and all the clothing that the well-dressed girl wears. But we may be lonesome despite all our virtues and knowl-

edge. We may not know the first rules of friendship. And life is always incomplete without friends.

Friendship does not happen. It is based on definite rules of actions and reactions.

In the coming pages we are going to discuss the traits which enable us to be friendly with the family, the boys and girls, and with ourselves.

Have n't there been times when you could not get along with yourself? You wanted to be considerate and courteous and gentle, but your tongue ran away with you and you said cutting things? Or you felt as if you were a failure and that everything you did was wrong? You were not practicing the rules of friendship with yourself.

Remember the times when you could n't get along — just could n't get along — with Dad or Mother? You had misplaced temporarily the rules for friendship with your family.

And then the times you were a wall flower, or the times you were too popular so that all the girls looked at you askance? You had forgotten to practice the rules of friendship with the group.

Have you ever stopped to wonder why you like some girls and some boys and can't endure some of the others?

Let's look at the list you invited to your house and let's think back to the way your mind worked when you were planning the list.

You said Miriam made too much fun of the last party she attended. You did not want her to do the same thing after she had been at your house. So you left her out. That's fair enough.

And David was all right, but the last time you had a "date" with him he broke it and never called to explain. So he's off your list. That seems fair, too. You put Edward on in David's place.

What about Violet? Well, she always acts so bored. She never seems to have a good time unless there are four or five boys around. So you chose Julia.

And then Frank goes so "highbrow." All he can talk about is school, and classes, and dates — history dates — not the other kind.

Why did you ask Julia? You said she was good fun, she always looked nice but never seemed to think about her clothes.

You don't want a person who makes fun of you and your doings after she leaves you. Such a person is not loyal or honest. She told her hostess she had had a "marvelous" time and then went away and made fun of things.

You want a person who is dependable. David did not keep his promise. You can understand a person having to break a "date", but you fail to see the justice of his letting the broken promise go unexplained.

You want a person who acts as if she were having a good time. You put time and thought into planning the party and then you watched Violet sit there and look languidly on and say, "Oh! I'm sorry I don't know how to do that. Oh! I'm so sorry, I never could do anything in guessing games."

Violet had no right to accept your invitation if she did not intend to show her appreciation by taking a share in the activities. A bored person is a bore to have around.

You want a person who knows when to be foolish, when to be serious, when to be gay, when to be a blue stocking. Frank has not learned that all work and no play makes him a dull boy.

UNIT 1. THE CHARACTERISTICS OF A DESIRABLE FRIEND

What is most important in friendship? Is honesty? Remember the time that your brother said you looked like a sight in that new dress? He may have been honest, but he might have tempered that honesty and frankness with tact.

How about sympathy? Is that the most important? Remember the time you sympathized with Marie because her father would not let her drive the car alone? And remember how she became emboldened by your sympathy and took the car out? Remember the bent fenders that resulted? Sympathy is fine, but it needs to be tempered with understanding and recognition of an older person's point of view.

Is imagination or the ability to put yourself in the other person's place an important part of friendship? That's quite inclusive,

for when you have that, you possess fairness, thoughtfulness, justice, generosity, punctuality, and sympathy.

Can you get along with other people without a sense of humor? Or is that trait more necessary when you try to get along with yourself? What about interest in life in general? And self-control?

How about courtesy, loyalty, dependability, tact, contentment, adaptability to new surroundings, appreciations? Don't we need to call on every one of those when we live with a family?

A grown-up is apt to name tolerance as the greatest aid to friendship because a grown-up has learned the value of three things — "live and let live", "the ability to see gray instead of distinct black and white", and "the way of life is wonderful — 't is by abandonment." There you have three ways of re-stating the word "tolerance" or getting along with people. There is a whole philosophy of life in those phrases.

No girl or boy in the 'teens can possibly accept all those statements and believe them. It is just as well, perhaps. For in the enthusiasm of youth lies a crusader's greatest fighting strength. It is middle age that grows tolerant, but so many heartaches would be saved if youth could only acquire that virtue. On the other hand, if we all became tolerant, the world might not progress at all. We might say, "Oh, well, what's the use of trying? We can't change human nature." Human nature can be changed — is being changed. But to change it we need the flaming enthusiasm of youth, the tolerance of middle age, and the mellowness of old age.

What trait do you put first? Is it loyalty, tolerance, ability to put one's self in another's place, ability to get along with people? The ability to get along with people implies many things. It's hard to choose, is n't it?

CLASS ACTIVITIES

1. Make a list of the important personality traits which the kind of person you would like to be has.

2. Opposite each of these traits in your list give a situation at home or school in which this trait might be exercised.

3. Make a list of faults which might need to be overcome by a person who wished to live with others successfully. Suggest ways of overcoming these faults.

4. Work out a score card which might be used in checking a person as to their desirable and undesirable traits. Score without revealing names the most attractive and the least attractive person you know.

5. Make a list of the general principles which might be guides in forming new friends and holding former friends.

6. Write a description of a person whom you would consider an ideal friend, telling what characteristics that person will have and how she will show these in her relation with others.

7. What standards would you apply to your choice of friends, either boy or girl friends?

8. Be prepared to defend or refute in class the statement that "a girl should choose as a boy friend a boy who possesses the qualities which she considers essential in a satisfactory life partner."

9. Work out a special report on some rule of etiquette which you consider important and what general principles of conduct underlie it.

10. Work out a score card for checking yourself on your ability to be a gracious hostess or a pleasing guest. See Units 2 and 3.

TEST: Your Understanding of the Characteristics of a Desirable Friend

Directions: In the list at the right you will find some characteristics of a person who would make a desirable friend. In the list at the left are a series of phrases describing the actions of friends who may possess one or more of these characteristics. Read the characteristic in the column at the right, find in the column at the left the phrase or phrases which you think most nearly describe this characteristic. See if the other members of the class agree with you on your decision.

Thus: Coöperation may be shown by a friend (1) who does her share; (3) who fits gracefully to plans of other members of the group; (4) who does what she is asked graciously; (11) who has the ability to get along with others. Hence you would place the numbers 1, 3, 4, 11, on your paper after the characteristic "coöperation." Thus: Coöperation 1, 3, 4, 11

MAY BE SHOWN BY A FRIEND WHO

1. does her share
2. does not demand more than her share of interest
3. fits plans gracefully to plans of other members of group
4. does what she is asked graciously
5. does what will produce the best for all concerned
6. keeps quiet and well poised in the midst of a trying situation
7. controls temper when things go wrong
8. has a respect for the privacy of others
9. has the ability to keep confidences
10. is able to radiate happiness
11. has the ability to get along with others
12. is fair in judgment of other people
13. is on time for appointments
14. makes an effort to have other people enjoy themselves
15. gives more than she demands of her friends
16. can see both sides of a question
17. is a friend even when circumstances are most unfavorable
18. does what is expected of her even if superiors are not present
19. does not talk about her friend behind her back
20. is considerate of the feelings of others
21. is not afraid to do the right thing even in the face of adverse criticism
22. has a respect for the property of others
23. will tell a friend when she feels she is hurting herself some way
24. understands the difficulties encountered by another
25. acknowledges good qualities in others
26. can laugh at a joke at her own expense

CHARACTERISTIC

a. loyalty
b. punctuality
c. poise
d. tact
e. courage
f. honesty
g. self-control
h. reliability
i. tolerance
j. industriousness
k. generosity
l. cheerfulness
m. adaptability
n. thoughtfulness
o. sympathy
p. courtesy
q. kindness
r. justice
s. appreciation
t. agreeableness
u. sense of humor

TEST: Use Your Knowledge of Famous Pairs to Match These Names

The following list gives famous pairs of people. Most of them are famous because of great friendship they had for one another. The pairs have been jumbled. See how many pairs you can straighten. Tell what part each one of the pair played in completing the couple.

David	Molly
Aucassin	Naomi
Amos	Prince
Jill	Jonathan
Tweedledum	Jack
Lewis	Nicolette
Fibber McGee	Andy
Ruth	George
Juliet	Eve
Adam	Tweedledee
Martha	Romeo
Cinderella	Clark

UNIT 2. THE PERFECT HOSTESS

We might discuss our friends first and decide what qualities we like in them. But suppose you start at home instead and discuss yourself as a perfect hostess. After you have yourself all straightened out and made perfect, then you can, with perfect propriety, try to do the rest of the world over.

A perfect hostess possesses imagination, consideration for her guests, poise, and a knowledge of social rules and customs.

In choosing guests the hostess selects those who "speak the same language." That statement is not to be taken literally, but figuratively. If you invite a girl who never has gone to your school, never has met any of your other friends, or if you invite a guest who is fifty and the other guests are fifteen, you will find there is a lack of common language. That makes it difficult. Visiting cousins from out of town need to have special consideration shown them by other guests or they feel out of things. They may be as far apart as if they were actually speaking a foreign language.

A tea given for a visiting guest is usually safe because there are so many people coming to the tea and staying for so short a time that little is said beyond the conventional greetings and remarks. Those are general enough to be given in a universal language. But supper or dinner parties are more intimate, and need more thought given to the guest list.

The perfect hostess gives her guests explicit directions, and the approximate time required, for reaching her home if they are strangers. If her guests are coming by street car, bus, or train, she tells them the name of the stop before the one at which they should get off. This allows them to travel with greater serenity than when they have to listen and listen, always wondering whether the next stop called will be theirs and whether they can reach the exit in time.

The perfect hostess tells her guests the hour at which she plans to serve the meal. She tells them something of the other guests, so that they will have an idea as to the way in which they should dress. Is the party to be a neighborly run-in-on affair or is it an honest-to-goodness party?

In all these preliminaries the hostess has shown imagination. She thinks ahead for her guests and thinks back to the times when she wishes her hostess had been as helpful.

Should a guest arrive late, the hostess never, never lets her guest know she is late. The soufflé may have fallen, the cream of tomato soup may have curdled, but courtesy and consideration for the guest precludes any remark on the guest's tardy arrival. And that takes real self-control on a hostess' part.

The perfect hostess has planned a meal which contains foods that a normal person likes. Since people may be prejudiced for or against sea foods, she does not serve those unless she is sure of her guest's tastes.

The perfect hostess considers her dieting friends. A meal which is overloaded with whipped cream, rich sauces, candies, and bon-bons is not a kind meal. Think of what your guests will say next morning when they step on the bathroom scales.

The perfect hostess never apologizes for her food, never upsets the routine to prepare other dishes for a guest who is so rude as to refuse foods put in front of him.

It may be that the hostess discovers there is salt in the ice cream at the time she is dishing it. She has three courses open: to serve it and say nothing, to serve canned fruit or other substitute dessert and say nothing, to serve canned fruit and say, "I'm sorry. I did have such a nice dessert planned, but something happened to it so we have the peaches instead." That is quite permissible, because it lets her guests know she considered them worthy of a more "high stylish" dessert than the family stand-by, canned fruit. But most hostesses are not content with a simple statement. They make it and then they worry the subject as a dog worries a bone, always coming back to it until finally the guest carries away with her the firmly fixed knowledge that a catastrophe happened in the household which entertained her. And when she thinks of that house, she says, "Oh! yes, that's where we had the burned soup or where the ice cream had salt in it." It is better never to apologize.

The perfect hostess does not get upset if some part of the table service goes awry when the meal is being served. She realizes that the mistake won't make a particle of difference one hundred years from now, ten years from now, ten weeks from now. But she does make a solemn resolve to practice and practice until she knows that the next time she entertains the same sort of mistake cannot occur.

The perfect hostess keeps three subjects out of the conversation: politics, religion, and an account of a recent operation. Operations are not interesting to any one save the person who has lived through them.

Politics and religion are not subjects that lend themselves to debate or discussion. Both those subjects involve one's emotions, and reasoning is never done clearly where emotions are concerned. We get "het up" and "emote" on those two subjects. Debate or argument never changes one's attitude. It is wise to realize that there is room for honest differences of opinion and that one's convictions are, after all, a matter of one's own thinking.

Should the subjects get into discussion and beyond the hostess' control, she is justified in breaking into the discussion and saying, "You know I don't believe we shall ever get anywhere discussing

that, suppose we talk about — oh! about the weather." Even so banal a subject may be welcomed.

A hostess does not show she is disturbed if a guest or a member of the family upsets food, breaks a dish, drops food upon the floor. Accidents happen in the best of well-regulated families and are much better ignored.

A perfect hostess makes no comments to the remaining group when the first member of the party has to leave. Family skeletons are not disinterred, for other guests' delectation. When that happens, the guest who leaves next must say to herself as the door closes upon her, "Well, I wonder what they are saying about me now that I am out of the way?" There are clubs where any member refuses to miss a meeting, for she says she knows she will be discussed backwards and forwards in her absence!

A perfect hostess makes it a rule never to discuss a guest with any other guest or with other members of her family, especially in the presence of small children. Small children draw queer conclusions from statements they hear and do not understand.

A perfect hostess plans a conversation menu as well as a food menu. Many a hostess is so distracted with her last-minute preparations in the kitchen that she can't think of anything but the gravy, and the rolls, and the cake. The perfect hostess thinks up a number of interesting topics and has them ready to throw into the conversational arena if need for them arises.

A perfect hostess plans sleeping quarters that afford privacy, comfort, and rest for her overnight guests.

If the guest room has a clothes closet used by some member of the family, his belongings should be removed before the guest arrives.

The perfect hostess sees to it that shades do not flap, beds do not creak, that sufficient bedding is provided. She puts a clock that goes, books and current magazines that are readable and appropriate, a sweet-meat jar with candies or cookies, towels, sewing kit, writing paper, stamps, clean brush and comb in the guest room.

The perfect hostess gives her guest an idea of the family schedule, "gets up at such and such a time, eats breakfast at such and such a time, leaves the house at such and such a time." She does

not say, "Now you are here for a good long rest. Stay in bed as long as you want to do so, get up when you feel like it." That is all too vague and leaves the guest unaware of family customs.

The perfect hostess does not feel that she needs to plan something for every moment of a guest's stay. Nor does she leave her entirely to her own devices. The perfect hostess plans to pay all the expenses incidental to entertaining, but she realizes that a guest may be more comfortable when she is allowed to do some treating occasionally.

The perfect hostess does not put on company manners nor insist that the rest of the family do so. When that happens, the guest soon learns about it because there is an air of constraint in the house. Then, too, some member of the family always gives it away. The children do it, the man of the house does it, the hostess herself is apt to do it. In any case, some one does let the cat out of the bag, just as sure as shooting. That young brother will look up most innocently and say, "Where did this bowl come from? I never saw it before." You have had that bowl in the house all the time, but being a company bowl it is brought out only on occasions. It is wiser to use company things even when company is not visiting you. Then all the family takes their usage as a matter of course.

Listen to your company voice. Do you have one? Is it more saccharine, more affected than your everyday voice? Why should it be?

Listen to your company laugh. Does it sound genuine?

Listen to your company chatter. Is it everyday-ish? Why should n't it be?

People like to visit in homes where they are taken for granted, where they feel their hostess is genuine in her statements and her expressions of welcome. When you put on airs, your family who know you without those airs are apt to be amused or to mimic you. And then you get cross and lose your temper and your guest feels uncomfortable. She realizes, as the door closes on her final exit, that you are saying, "Well, thank goodness that is over. I won't have to have her again for some time."

But when you have been your real self, when you have truly enjoyed having her visit you, that feeling is expressed in your

words and tone. Your guest says, as she goes down the steps, "Well, I think my hostess enjoyed having me almost as much as I enjoyed visiting her. I feel that I have been in the home of a perfect hostess."

"To live content with small means, to seek elegance rather than luxury, and refinement rather than fashion" says Channing, in his "Symphony." Does that apply to a perfect hostess?

Take time now to go back over your actions as hostess and see whether imagination, consideration, poise, and a knowledge of social rules and customs were not found in all your actions.

UNIT 3. THE PERFECT GUEST

What about the perfect guest? What are her characteristics? She has imagination, consideration, knowledge of social customs, and willingness to carry her share of the social activities.

The perfect guest answers the invitation as soon as possible after she receives it. She does not make her acceptance conditional, nor does she accept and then send in her regrets because some other invitation she prefers has come along later.

The perfect guest arrives when she said she would. If she comes by train, she lets her hostess know the station, the hour of arrival, and the number of the train. All of this information may be secured easily at the railroad station. Then if her train is late, the hostess is able to check on a later arrival because she has the number of the train.

The perfect guest arrives on time if possible. Only an upset airplane, train, or bus schedule excuses her tardiness.

The perfect guest has dressed for the occasion. She does her hostess that honor.

The perfect guest does not keep dinner guests waiting while she does her hair over or fusses with her complexion.

She is vivacious but not boisterous; deferential but not meek and humble.

She eats, or pretends to eat, what is put in front of her. She does not hesitate to tell her hostess she likes the rolls, but she does not stop all interesting conversation while she gets the recipe.

The perfect guest carries her share of the conversational load. She does not say "Yes" or "No", and let the other end of the

conversation fall like a plummet. The perfect guest is a good listener, but an intelligent commentator as well.

The perfect guest has a conversational storehouse from which she may draw interesting comments, but from that storehouse she does not take smutty stories, malicious gossip, questionable words or phrases. There may be some young children at the table or there may be an older person who has not kept up with the social freedom of the day.

The perfect guest brings her own toilet things with her. She keeps her belongings in her own room and not strewn all over the place. She watches opportunities to purchase a magazine or a toy for the hostess' family. She does not buy food, lest she imply that the fare set before her is scanty. She may bring candy with her or may buy it when on a jaunt with her hostess.

The perfect guest realizes that the family want some time to themselves. She absents herself in her room on occasions. She suggests going to bed if she sees that her hostess is yawning. But she does not suggest too early a bed hour lest her hostess feels that the guest is bored.

The perfect guest does not spend a great amount of time in the bathroom early in the morning. Members of the family have to get ready to leave the house for the office or shop or school.

The perfect guest does not pry into family affairs. And certainly she never repeats happenings to other people whom she may visit.

The perfect guest goes at the time set for the end of her visit. She tries to take all her belongings so they do not need to be sent after her. She writes a "bread and butter" letter soon after her arrival home. She may or may not send a small gift. But with her she carries a happy memory of a home that delighted to honor her.

Sometimes a perfect guest is described as a person who has her social antennæ alert and responsive to meet conditions as she finds them.

UNIT 4. INTRODUCTIONS

Which is harder, do you think, now that you have been both hostess and guest — to be a perfect guest or a perfect hostess?

We have referred a number of times to a "knowledge of social

customs and practices." What do we mean by that large term? Etiquette, plain everyday etiquette.

Etiquette has been defined as the coin of the social realm. Just as it is necessary to have coin of the realm, or money, to get anywhere comfortably in the world of to-day, so it is necessary to have social coin in one's social baggage.

Barter and trade have been thrown overboard largely for money. If one lived on a desert isle, one would not need money, nor would one need social graces. One could be as boorish as one pleased to one's self and there could be no legitimate complaint. But living with other people calls for the free passage of the coin of the social realm.

A man may be as worthy as he can be and lack a knowledge of social customs. His boyhood may not have given him an opportunity to learn the nice and gracious thing to do. We should not despise nor make fun of that man. We should realize "a man's a man for a' that."

But you are fortunate, for you do have a chance to learn the social amenities that make living a more gracious thing, and failing to profit by that chance makes you more culpable when you slip.

Suppose we consider the matter of introductions first. There are only a few rules. Socially a woman is honored above a man and a mother is more honored than any other woman.

After that comes a recognition of the deference due to age and to position.

Royalty, and clerics high in the church, or clerics acting as representatives of a person high in authority are given precedence over any one else, even one's mother. But few of us hobnob with presidents, or kings and queens, popes or prelates, so that the matter is really quite simple.

A woman is always presented to one's mother.

A younger woman is presented to an older woman.

A young or older woman is presented to a person distinguished by position or deeds.

A man is always introduced to, or presented to, a woman.

A younger man is presented to an older or a more distinguished man.

"Miss Green, may I present Mr. Brown."

"Mary, may I present Walter Brown, Miss Green, Mr. Brown."

"Mary Green, I want to introduce Walter Brown."

When two people are introduced, the proper answer is, "How do you do" or, "How do you do, Mr. Brown" or, "Mr. Brown," with an inclination of the head.

It is a great help if your hostess who does the introducing adds a tag to your name, and says — "Walter, you ought to know that Mary has a famous football player for a brother."

If a young girl, a mere chit, is being given the privilege of meeting a distinguished guest, Mr. Walter Brown, the introduction would be worded like this, "Mary, this is Mr. Walter Brown, a great friend of Father's. He has shot lions in Africa and jaguars in the jungle." In this case Mr. Brown is given all the honors and yet the rule that says a man is always presented to a woman is being followed.

It is wise to omit the phrase "my sister-in-law", "mother-in-law", "father-in-law", "brother-in-law." There seems to be something mirth provoking and almost slurring in references to "in-laws." This is due to funny papers, comedians and their jokes. "In-laws" may be the finest people in the world, as may step-mothers and step-fathers.

The phrase "mother-in-law" or "sister-in-law" may be changed to, "this is my husband's mother" or "my brother's wife."

When marriage has changed surnames, it is necessary to give the surname in the introduction, otherwise the person being introduced does not know what the last name is. It is wise, also, to include the last name in introductions between two girls or two boys or a girl and a boy.

Suppose a boy is introduced to you and suppose he likes you and wants to telephone you the day after the party. Suppose he has heard you called "Mary" or "Mollie" or "Rusty." He can't very well call the telephone company and say, "Operator, last night I met a swell girl. She lives somewhere in town. She has red hair and the crowd calls her 'Rusty.' Give me her telephone number." Now it is barely possible that the telephone operator

does not think you are a swell girl or she may know another girl with red hair whom she thinks is "sweller" than you. You can get the point, can't you?

A girl rises when she is being introduced to an older woman. She does not rise when being introduced to a man unless he be much older and distinguished.

A girl offers her hand if she desires to shake hands. A man waits for that action.

A man, woman, or child never uses the banal expression, "Excuse my glove" nor, "Pleased to meet cha" nor, "Meet the missus" nor, "Shake hands with George" nor, "Let me make you acquainted with —." They are found in the conversation of the socially uninformed.

A hostess extends her hand in greeting her guests and in wishing them farewell. The gesture goes back to the days when daggers were held behind a host's back and dashed unceremoniously into a guest's body. The open hand extended to a guest was a sign that there was no concealed weapon and that sudden death was not imminent.

It is foolish to think that a stranger coming into a party late must be taken around the room to be introduced to each person. The guest can't remember the names and the hostess grows flurried. It is better to say, "Girls, this is Mary Jones," and let it go at that. She can meet the girls individually afterwards.

A thoughtful person does not go up to some one and say, "I don't suppose you remember who I am." Nor does she call a person on the telephone and say, "Guess who this is talking?" That girl has an overemphasized opinion of herself. She would be much better bred if she said, "How do you do, Mrs. Jones, I am Mary Smith." And when she telephones, she says, "This is Mary Smith speaking."

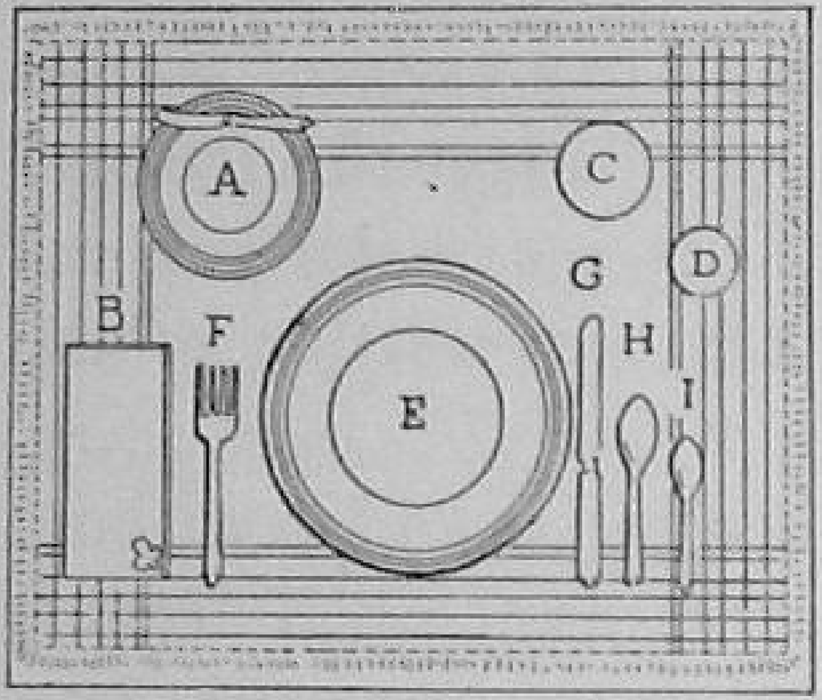
A well-bred girl does not walk in front of people in a room, unless she would make matters much more embarrassing by trying to slink behind them.

UNIT 5. TABLE SETTING AND SERVICE

Fashions in table setting, like fashions in clothes, change. In Queen Elizabeth's day, forks had jeweled handles, were objects

of curiosity, and were kept locked in jewel cases. Hands were dipped into a common bowl, were filled with food, and conveyed to the mouth. Then the dirty hands were wiped on the tablecloth, which hung far over the edge of the table. Perfectly proper procedure in Queen Elizabeth's day. Not proper now.

In great-grandmother's day it was proper to pour tea or coffee into a saucer, lift it to the lips, gently blow upon it to cool the steaming beverage, then take deep quaffs from the saucer while the handleless cup remained on the table. The glass cup-plates, which are so much of a collector's item to-day, came into being at that time because the drops on the side of the cup would run down to spot the cloth. So the cup was set on the small cup-plate while the tea was drunk from the saucer. Perfectly proper in great-grandmother's day! Not proper now.



Individual Cover for Breakfast Service

A. Bread and butter plate, butter knife
B. Napkin (fold lengthwise or in triangle)
C. Water goblet or glass
D. Milk glass
E. Breakfast plate
F. Fork
G. Knife
H. Dessert spoon (for cereal or berries)
I. Fruit spoon

(The coffee cup and saucer with the teaspoon on the saucer is passed by hostess or placed by waitress. This service belongs at extreme right of individual cover.)

Even if Mother does not follow the latest methods of table service, it argues nothing worse than a failure to follow the latest fashion or whim in table etiquette. Mother may be following yesterday's accepted usage.

To-day's rules are based on one general principle — the comfort of the guest is of first consideration.

Check through these rules of modern table service and see just how frequently the guest's comfort is kept in mind.

We start with the table covering.

Doilies or table runners are acceptable for breakfast and luncheon, but for the important meal of the day — dinner — the tablecloth covering the entire table is preferred. Men dislike "postage stamp" doilies that slither around on the table.

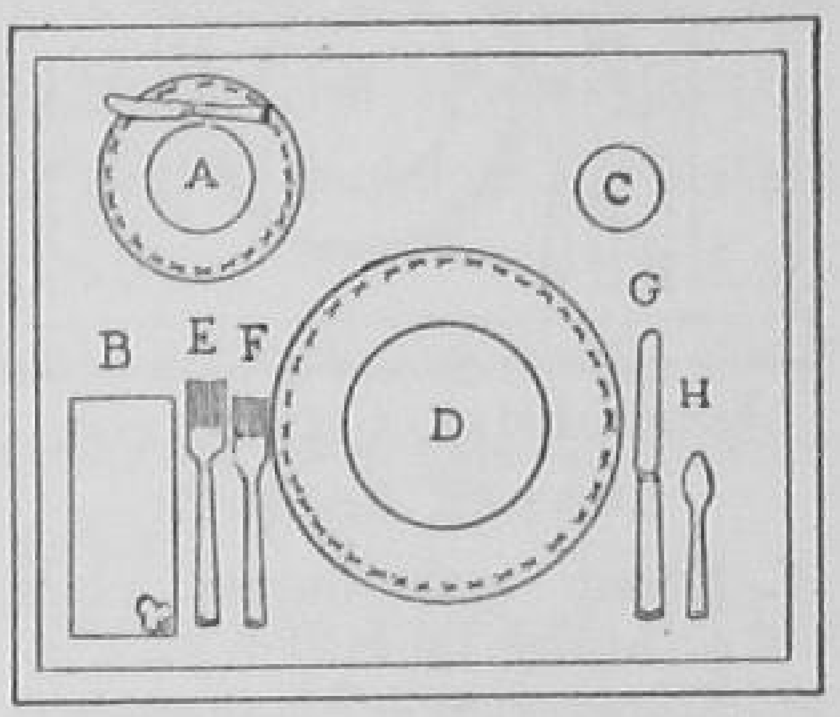
This cloth may be white damask, which is always in perfect taste, or it may be a soft-colored one, or one with bands of color

woven into it. In any case it is much quieter in tone than the peasant linens considered proper for the other two meals.

The table top is covered with a pad or silence cloth. This cloth extends over the edge of the table, but never shows below the edge of the table cloth.

The cloth is laid so that the lengthwise fold down the middle of the cloth extends lengthwise of the table.

In the center is placed a decorative centerpiece. This may be a bowl of fruit, a vase of flowers, a combination arrangement of flowers or fruit, and candles. Candles never should be placed on a table except when they are to be used. And candlelight is superfluous when daylight is adequate. That means no candles for luncheon tables.



INDIVIDUAL COVER FOR LUNCHEON SERVICE

A. Bread and butter plate, butter knife
B. Napkin (fold lengthwise. May appear on plate)
C. Water goblet or glass (place other beverage, when served, to right of plate)
D. Place or service plate
E. Fork
F. Salad fork
G. Knife
H. Fruit spoon

The centerpiece and candles should be well balanced and at such a height that they do not obstruct the view of the guests across or lengthwise of the table. Candles may be extremely tall and formal, or low and cozy.

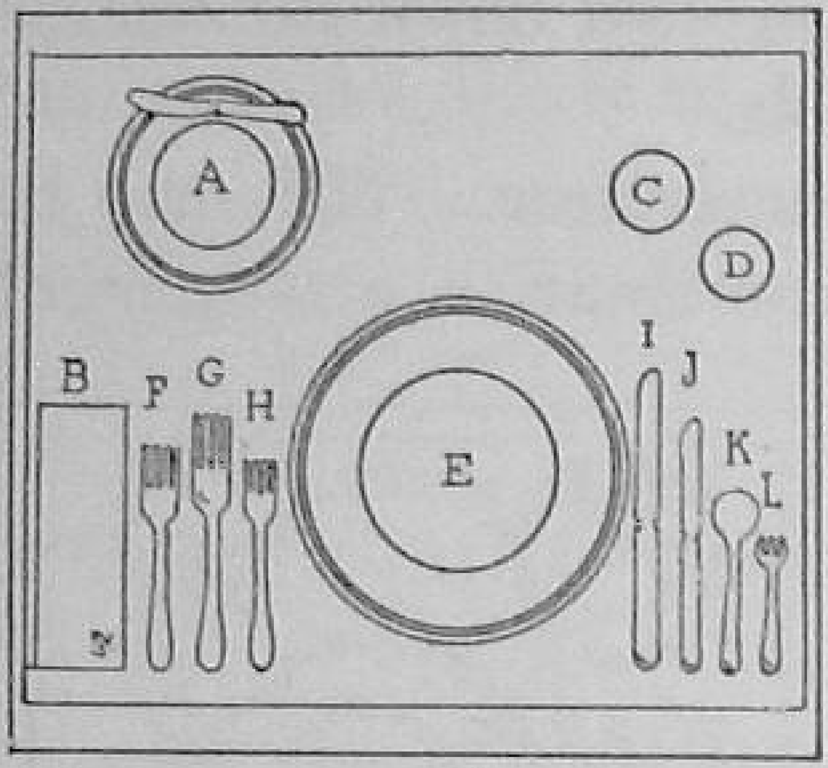
Twenty-two inches is the minimum amount of space which gives comfort to a guest. Twenty-four inches is better. The space allotted to each guest is known as a "cover." Each cover includes a napkin, silver, glass, and room for a plate.

Napkins are always fresh when a party is being given. At other times each member of the family may have his or her napkin which has been used at a previous meal. The napkins are identified in some way so that each person receives the one used previously. The marking may be a napkin ring, a napkin clip, or a special folding which identifies it.

Napkins used to be tortured into fans, cocked hats, and "land knows what!" Now they are folded simply, either into thirds crosswise and then thirds lengthwise, or into quarters both crosswise and lengthwise, or into thirds lengthwise and then fifths crosswise.

The napkin is placed either at the extreme left of the cover or in the center of the place plate at each cover. In this latter case there is no food on the table when the guests are seated.

Silver is placed at each cover in the order in which it will be used. A guest no longer has to look surreptitiously up and down the table to see what piece is being used. If, by any chance, there is any doubt, it is wise to remember this rule — the hostess is the social pattern of the evening. When in doubt, follow her lead.



INDIVIDUAL COVER FOR DINNER SERVICE

A. Bread and butter plate, butter knife
B. Napkin (fold lengthwise)
C. Water goblet or glass
D. Smaller goblet
E. Place or service plate
F, G, H. Entrée, main course, and salad forks
I, J. Main course and entrée knives
K. Soup spoon
L. Cocktail fork (or fruit spoon)

Tables in the "gay nineties" were set with an array of silver that made them resemble a jeweler's display window. Now the service is simpler. Only enough silver for two — or at most, three — courses is on the table at the time the guests are seated. That means it is no longer necessary to borrow the neighbor's silver for dinner parties.

Starting at the extreme left of the cover, we have, first, the napkin, placed with open folded edges parallel and at right angles to edge of table. Then comes the fork used for the meat course, unless a fish course precedes the meat course. Next in, and toward the plate, is the salad fork. Next to that comes the dessert fork. It is better to omit the dessert fork when the table is set and to bring it in with the dessert. All forks are laid with tines up and the edge of the handle in line with napkin, plate, and knives, one inch from the edge of the table.

Tables are "straight lined" these days, no fancy arrangements of silver. On the right of the place plate comes the salad knife, if one is used, then the dinner knife with cutting edge toward the plate, then the teaspoon, if one is to be used, then the soup spoon. Bowls of spoons are always up.

At the head of the forks is placed the bread-and-butter plate.

This has a bread-and-butter knife laid either straight across or down the rim of the plate. No angle for the bread-and-butter knife.

At the head of the knives or knife is placed the water and other beverage glasses.

At a dinner party it is best to use a stemmed goblet; at other meals a footed goblet may be used, or a tumbler may be chosen. Of the three, the last is least acceptable. It should not be necessary to place salt and pepper on the table, for it is assumed that the food has been properly seasoned. But there are times when salt is wanted for relishes like celery and radishes. And pepper grinders that give freshly ground pepper for the meat or salad course are considered best by the epicure.

When pepper shakers or grinders and salt cellars are used, they are so placed that one pair is exactly between two guests. The placement is in toward the center of the table.

If a fruit cocktail is served, it is customary to use a spoon. This is placed on the right, beyond the soup spoon. If a fish sea-food cocktail is served, a special fork is used. This is placed at the right of the soup spoon and parallel with the silver. Frequently, the spoon or fork is on the small plate on which the cocktail glass is resting.

Dishes containing jelly, relishes, condiments may be on the table before the guests are seated. In that case, the serving silver is placed beside, and not in, the dish. The placement of silver is in a straight line.

Crêpe-paper containers are sometimes used as favors. They hold salted nuts. Their use seems out of place on a beautifully set table. So do all favors. Since the nuts are to be eaten at the last course, it seems foolish to place them on the table for the beginning of the meal. But no matter when they are served or passed, no guest ever puts the nuts on the tablecloth. Nor does any other food go directly on the cloth.

Relishes to be eaten with the meat course belong on the dinner plate. Jam to be spread on bread or rolls is put on the bread-and-butter plate. Olives and celery are usually placed there also. These are put there by the guest and not placed ahead of time by the hostess.

Now that the table is set and the guests have entered the room and have seated themselves there comes the question of service. There are three types:

First, we have the informal, family, or English-style service in which food is placed on the table in large platters or dishes. It is dished and served by the host, hostess, or other member of the family.

Next, we have a service which allows some serving by the host and some passing by a waitress. This is called the compromise service. It is so called because it is neither straight English nor straight Russian service.

Russian service is very grand indeed. All food is passed. Plates are filled in the kitchen and placed before the guests. Additional service of food is offered by the waitresses or butler.

One waitress cannot take care of more than eight guests adequately. Nor can she act as cook and waitress at the same time.

There used to be a great to-do over the question of removal and placement. Should one be done from the right and the other from the left? If so, which one was which? Nowadays we say, consider the comfort of the guest. If it is easier to place or remove from the right, do so; if from the left, do that, but remember, as you remember your manners, that you must never, when you are a waitress, reach your arm in front of and across a guest. That is not conducive to the guest's comfort.

The other rule which is of importance is this: if you are passing something to which a guest is to help herself, you offer it at her left so that her right hand may reach over naturally and easily as she serves herself. To prove this, try reaching for something passed to your right, and unless you are left handed, you will find it exceedingly awkward.

There in brief you have this whole matter of table service.

But there are a few fine points. Suppose we consider them.

If a cocktail glass is set, as it should be, on a small service plate, a small doily of cloth, better of fine lace, should be between the two dishes. Glass slithers around when set on a smooth surface. And this is annoying to the guest. Paper doilies belong in restaurants, if anywhere at all; certainly not in a private home at a dinner party.

We hear a great deal about service, or place, or cover plates. These are large affairs, really quite pretentious. They may cost as much as five thousand dollars a dozen, so you see how "grand" they really are.

A service plate is put at each cover, where it adds to the beauty of the table. When the first course is brought in, it is set upon the service plate. When the first course is removed, the second course is set on the service plate. This continues until the hot fish or meat course is reached. This calls for a heated plate. At this stage the service plate, never having been eaten from at all, is taken away and the hot plate put in its place.

The service plate allows a hostess to observe one of the fine points of table service which says never leave an empty space before a guest until the dessert course is reached.

But when the service is family-style or even compromise-type, it seems something of an affectation to use service plates. They really call for things like twenty-seven-inch napkins, butlers, and all the other appurtenances that go with perfect service.

If the meal is served family-style, the heated dinner plates are set in front of the host. Then the vegetable dishes, with serving spoons, are set before him. Serving spoons are laid beside the dishes, not in them. Lastly, the serving platter of meat is brought in and set squarely in front of the host.

The carving knife, fork, and fork-rest are at his right. He does not sharpen the carving knife at the table.

He carves enough meat for the entire table. Then he starts serving. Meat, potatoes, and a second vegetable are placed by him on each guest's plate. He may or may not add the gravy.

If there is a waitress, she takes the filled plate from him and sets it before the guest of honor, if a woman, or before the hostess.

Then she returns to his left side and takes the second filled plate. She places this in front of the hostess or the guest of honor, the one of the two who was not served first. The third plate goes to the person on the right of the guest of honor, and so on around the table. The host does not serve the women first, the men second, and the children last. The guests are served in the order in which they are seated.

After the meat course has been served, the waitress passes the rolls or bread. She holds the plate or bread tray on the palm of her left hand and offers it to the left of the guest. This allows the guest to reach her right hand over and to help herself easily.

The salad may or may not be served with the meat course. It is placed, as a rule, at the right unless the beverage is being served with the meal. In that case the coffee cup and saucer go on the right and the salad plate goes on the left. There are no small vegetable dishes used any more. The halo of small oval dishes which used to surround the plate is now a thing of the past. Even the juiciest of tomatoes and the creamiest of peas go on the plate with the meat and potatoes.

The dessert may be served by the host or the hostess, or it may be passed, allowing each guest to help himself. The offering is always at the left of a guest.

We spoke of bread-and-butter plates. Correctly speaking, they have no place on the formal dinner table. At such a meal butter may appear only with the hors d'œuvres. It is never served with bread or rolls. The roll, or the bread (if bread is served at a formal dinner, it is cut into a rather long cube), is placed on top of the napkin. The only roll which is correct is a water or crispy French roll. This, too, is placed on the napkin and is on the table when the guests are seated.

Most men, however, like both bread and butter with their dinner, so we put the bread-and-butter plate on the table, since, after all, we want to consider the men's likes, as well as Madame Grundy's.

The correct dinner salad is one of green vegetables served very simply with French or a modified French dressing. This salad is best eaten with the game course. But game does not follow the roast or joint in many of our homes. We are then confronted with the question — Shall the salad be served with the meat course, or shall it be served as a separate course? Here again the likes of the men guests should be considered. Men are not fond of most salads. But they are more apt to eat salad if it appears with the dinner course. When it is brought in with that course, it may be eaten with the dinner fork. Nowadays it is considered correct to cut the salad with knife and fork. That being the case, the use of the salad fork with its specially

shaped cutting edge is superfluous. But since most of us own salad forks, we like to let our guests know we have them! So we continue to place them on the table. At a truly formal table the knife and fork used for the salad is one somewhat smaller than the dinner knife and fork. It is about the same size as the dessert one. In some cases it is the size sold as children's silver — not, of course, the looped-handle affairs.

When the waitress is assisting the host in serving the meal, she follows this procedure — we assume the meat course has been eaten: She brings in from the kitchen two plates of salad. She places one of them on the sideboard. With the other in her left hand she goes to the left of a guest, removes the soiled dinner plate with her right hand and places the salad with her left hand.

She goes to the sideboard, places the soiled plate down, takes up the second salad plate, places it before the guest, goes to the sideboard, picks up the first soiled plate and takes it, as well as the one she has in her hand, to the kitchen. She repeats this until all are served.

When the dessert course is reached, she removes any serving dishes containing food, all relish and condiment dishes, salts and peppers. Then she removes the used plates, never stacking them.

She takes a napkin, crumpled loosely, in her right hand, a small china plate in her left hand and deftly brushes the table free from crumbs. She holds the plate below the level of the table. Then she brings in the dessert. If the host or hostess serves it, she stands beside the server, taking each filled dish in turn.

If the dessert is served from the kitchen, she brings in two servings at a time, placing one on the sideboard. Then she places the first, gets the second, and so on. If she passes the large dessert dish to the guests, allowing them to help themselves, she has placed the dessert plates with finger bowls, if used, in front of the guests before she offers the dessert.

The finger bowl with its doily and with or without its little plate is set on the dessert plate. The guest removes the finger bowl, plate, and doily to a space directly in front of her, above the dessert plate.

The waitress brings in the dessert silver. Correctly, it should be a dessert spoon and fork unless the dessert is one which calls for only one piece of silver.

If the coffee is served with the dessert at the table, the hostess may pour it, always placing the spoon on the saucer before handing it to the waitress. The coffee may be served later in the living room before the fire or on the outside terrace, where the evening view may be enjoyed. No napkins are used with this after-dinner coffee service. Cream should not be offered either.

The waitress has not used a small tray during the meal service up to this point. But when coffee is served at the table and she offers sugar and cream, two things which are used almost simultaneously, she places them on a small tray which has been covered with a small doily. The tray is held on the palm of her left hand and offered to the left of the guest.

If the waitress has had to pass serving dishes filled with hot vegetables or if she has passed a hot-dessert serving dish, she has placed a folded napkin on the palm of her hand and placed the serving dish on that.

Correct serving is not complicated. It is nothing to get all wrought up about. It consists of common-sense rules applied to serving food to guests so that they may enjoy the meal. The serving should be done deftly, graciously, and easily.

We spoke earlier of the host's choice as to serving the guest of honor or hostess first. In Europe, the guest of honor, when a woman, is always served first. In this country the custom varies. The reason being this: America is a rather "yeasty" country. We rise or fall on the social ladder largely according to income. We may be "dining" (the word is used advisedly) in a home where things are done more grandly than we are accustomed to. We may be in doubt as to the correct procedure. We may never have seen French artichokes before. If the hostess is the social pattern, we can watch her, see her pull off a leaf from the artichoke, dip it in melted butter or sauce, draw it between closed teeth and then discard the leaf. We follow suit. But if we did not have her as a social pattern, we might attack that artichoke with a fork with most disastrous results. If comfort of the guests is the first consideration, then it is quite possible that the hostess should be served first.

The serving of breakfast, luncheon, and tea are all based on the same fundamental rule — consider the comfort of the guest.

A good waitress tries to anticipate the hostess' needs. She does the same for the guests. She watches the water glasses or goblets. To refill them she draws them toward the edge of the table, refills them without lifting them from the table, and then puts them back in place at the head of the knives.

Remember that serving thumbs and finger tips is not considered good form. Trays are never used except for passing two or three articles that are being used together. Serving dishes are best held on the flat of the palm.

Guests usually come to the tea table at a stand-up tea and get the tea or other beverage from the hands of the women who are pouring. But a waitress may be close at hand to pass the sugar, cream, lemon, sandwiches, small cakes, salted nuts, and bonbons.

She watches the guests, and when the tea is finished, she removes the cup and saucer and napkin.

A good waitress is soft spoken, simply dressed in uniform. She wears no jewelry, uses no perfume. She wears rubber-heeled shoes. Her hair is tidy and her finger nails are those of a lady. Highly colored nails are too conspicuous ever to be in good taste, but especially so on a person whose hands are as much in evidence as those of a waitress.

UNIT 6. TABLE MANNERS

You may not believe it, but table manners are based on consideration for the other person and on common sense. Small children who are nagged and nagged about table manners think that they must be based on scoldings and quarrels. But such is not the case.

Here are the rules that young children hear over and over: don't put your elbows on the table; don't take such big mouthfuls; don't take such big bites; don't talk with your mouth full; don't sprawl all over the table; don't leave your spoon in your cup; don't take a bite out of a big piece of bread; don't spread a whole piece of bread at one time; don't reach across the table;

don't play with your food; don't put your crusts on the table cloth; don't, — don't — don't —

Such an array of "don'ts"! Are they reasonable? Let's take them in order:

Don't put your elbows on the table. When you do that, you spread over the space allotted for your "cover" at the table, over onto your neighbor's space.

Don't take such big bites and don't talk with your mouth full. If you do take big bites, you are not a pretty-looking sight with bulging cheeks and overflowing lips. Your neighbor across the table has to look at you; the sight may take away her appetite. Don't talk with your mouth full. Suppose you have just taken a large bite and a distinguished guest asks you what you did in school to-day (even distinguished guests have been known to ask such foolish questions but courtesy demands you answer him). You can't enunciate clearly because your tongue has n't room to move and some of the food is apt to fall out of your mouth when you open it. Nice sight for the person across the way.

Don't leave your spoon in your cup. A stray elbow may hit the spoon handle and knock it out of the cup, carrying with it a spray of cocoa. The guest who sits beside you has her dress ruined.

Don't take a bite out of a big piece of bread. Look at yourself in a mirror with a slab of bread up to your mouth. Look at the marks of teeth left in that slice. Appetizing for another person to see?

Don't spread a whole slice of bread at one time. That looks as if you were going after the bread "in a big way." You are not eating against time to catch a train.

Don't reach across the table. A long reach may be an excellent thing to have in tennis, but at close range the action is not so graceful nor worthy of applause. You may upset your neighbor's glass of water in the process or the flowing draperies on your sleeve may get well covered with butter or jam. Messy, don't you think?

Don't play with your food. Mud pies are a childhood pastime. Laying out streets and paths in mashed potato with gravy rivers running in between is not supposed to be a part of an adult's dining-room practice.

Don't put your uneaten crusts on the tablecloth. In the first place, only a dentist is interested in an impression of your bite; in the second place, tablecloths are linen and should be treated with respect; in the third place, the crust is good for you, even though it will not make your hair curl!

Since we eat most of our meals in the presence of other people, we ought to make a practice of considering them, don't you think? We don't like to see forks held like pitchforks, holding down a load of hay. We don't like to hear food audibly chewed.

There is such a thing as carrying table manners to an extreme. The little finger foppishly crooked as the cup is held and the continual wiping of the lips with the napkin are cases in point. The feeling that one is in social disgrace if by chance a mouthful of salad is conveyed to the mouth on the prongs of a dinner fork instead of the salad fork, the worried indecision as to whether the ice cream should be eaten with a spoon and the accompanying cake with a fork — all of these feelings are foolish. It is n't going to make any difference a few years from now what decision you made on these points. But if your table manners are disgusting, if they make other guests feel they would rather not eat at the same table with you, then there is reason to mend your ways.

There are a few table manners that make it easier for your host and hostess too. If you are sending back your plate for a second helping, place the knife and fork on the plate. Fork prongs up, knife blade in. Place them toward the center of the plate. This balances the silver and plate and there is less danger of a utensil falling off.

It is better to put them on the plate than to hold them in your hand with fork dripping gravy and shreds of meat clinging to the knife while you wait for your refilled plate to be returned.

When the course is finished, the silver is placed in the same way. This makes it easy for the plate to be removed from the table.

During the eating of a course the knife and fork, while they are not being handled, are laid on the plate rather than being draped from plate to tablecloth.

A hostess is proud of her linen. She prefers that you do not draw pictures on it with the fork tines, naturally. She finds it difficult to take out grease stains left when you put the salted

nuts right down on the cloth. Tablecloths are not such good repositories for salt piles into which you dip celery, either.

So far we have considered the effect of your table manners on the other guests and on your hostess.

Now we give you special help.

Soup served in two-handled cups is first taken with a soup spoon, a round-bowled one. When the temperature of the soup has been tested, then the cup is lifted with the right hand and the soup is drunk. Not one long draught at a time, however.

If you crumble crackers pell mell into your soup, you get a soggy mass which is difficult to eat gracefully. It is better not to crumble crackers nor to put them in the soup.

If you spoon your soup away from you, and if you take it from the side of your spoon rather than the tip, you proclaim to the world that you are not famished and do not need to scoop everything to your mouth as soon as possible. The side of the spoon placed to your lips is kinder to you and your clothes than is the tip. There is less likelihood of spilling, besides giving your arm motion more grace.

If you cut but one or two pieces of meat at a time, you again tell the world that you are not famished. You can afford to take your time. Your handling of knife and fork should be graceful and well balanced. Whether you hold the fork in the left hand and convey food to the mouth with it so held, or whether you transfer it to the right hand after laying the knife down, is a matter of national custom. On the continent the fork is held in the left hand continuously. In the United States we transfer it to the right hand.

There is no excuse for putting the knife blade to the lips nor of crooking the elbow at an ugly angle when bringing food to the mouth.

You are quite within your rights in telling your hostess you are enjoying the meal, that you like the mashed potatoes especially, or some such phrase, but don't be so full of praise that you do what the English call "splahming" all over the place. That never sounds genuine.

You place a meat relish on your plate with the meat and potatoes rather than on the bread-and-butter plate. But jam or jelly

which is to be added to your roll goes on the bread-and-butter plate with the roll and butter. Obvious, is n't it?

You break off small pieces of roll or bread and spread them as you get ready to eat them.

You consider olives, small pickles, celery, radishes, French artichokes, small cakes, grapes, cherries, strawberries served with the hulls, as finger foods.

Avocado pear, when served in the shell, is eaten with a spoon, as a rule. All other salads are fork foods.

Fruit cocktails are eaten with a small teaspoon. Sea-food cocktails are eaten with a special small-pronged fork.

Only at picnics is chicken eaten with the bones held in the hand. Serve corn on the cob at the family dinner only when the ears are broken into short enough lengths so that one hand can hold a length easily.

Asparagus is a fork food, always. Frosted cake with soft icing is eaten with a fork. Fresh fruits with and without large stones are placed on the fruit plate, and impaled on one side with the fruit fork. The fruit knife is used to peel the fruit. The skin is worked down toward the plate. Pieces are cut off with the knife and brought to the mouth with the fork.

Berries are eaten with a spoon, so are orange or grapefruit sections.

Baked apples, cooked prunes, fruit compotes are served with both the dessert spoon and fork. The fork impales the fruit while the spoon removes the pit and then conveys the fruit pulp to the mouth. Individual deep-dish pies are brought to the table accompanied by both dessert fork and spoon.

Coffee, tea, and other beverages are always taken from the cup. The beverage is never blown upon. Nor is it stirred round and round until it resembles a miniature whirlpool. When sugar is added, only enough stirring is done to dissolve the sugar. Then the spoon is put on the saucer.

If you should get a bone, a seed, or any objectionable material in your mouth, lift your cupped right hand and remove it as unobtrusively as possible. Do not lift the napkin for a shield, as that large expanse of white calls attention to the fact that you are about to perform a disagreeable operation.

When the meal is finished, lay your crumpled napkin beside your plate. At a signal from the hostess rise, or if she gives no signal stand when she does. Do not push your chair back in under the table. Leave it as it is after you are standing.

UNIT 7. MANNERS AND THE SOCIAL LIFE

We have discussed the manners of the perfect hostess and the perfect guest. We have talked about introductions, courtesy letters, and table manners. Are n't we mannerly enough?

Not quite. We still have odds and ends of manners to discuss.

First, the manners of the well-bred girl in the street. She does not call attention to herself by noisy clothes, unseemly jumps and sprints, loud yells or conversation, incessant giggling, dawdling near the drug store or other places where boys congregate.

She does not walk with other girls three or four abreast, twined arm in arm, down a public highway. She remembers that other people may want to pass her or to use the thoroughfare.

If she is walking with a boy, she does not hang on his arm, ever. She does not give him playful nudges or shoves.

She expects him to take the outside of the street, but is not upset if he stays on the inside occasionally. Originally the escort took the outside to guard his lady-fair from untoward attacks made by blackguards in the shadows. They were most apt to attack from the outside. So he walked there. But nowadays that danger is lessened. It is better for the boy to walk on the inside if keeping to the outside means capering back and forth as the two walk down winding cross streets.

The well-bred girl does not want the boy to walk between her and another girl if there are three in the party. He belongs on the outside and she makes no move to put herself beside him.

The well-bred girl follows the usher in church or theater. Her escort follows her. She steps into the pew or row of seats first. The escort follows. If there is no usher, the boy leads the way In leaving a public place the escort leads, if the crowd is large, to clear the way for the girl, who is supposed to be weak and timid and needs masculine protection.

In a restaurant when the waiter leads the pair to a table, he pulls out the chair for the girl and helps her remove her wraps. Otherwise her escort performs those services. The girl follows the waiter, with her escort following her, in entering a restaurant.

If the couple are taken to one of the small cubicles in a restaurant, they sit on opposite sides of the table.

If there are two couples, one couple takes one side and the other couple sits opposite.

The escort does the ordering. He asks the girl what she would like. She tries to be as easy on the boy's purse as possible, but does not make her effort so noticeable that he is embarrassed.

The escort pays the bill and does the tipping. Occasionally it is understood that each pays his or her share, but as a rule it is not the socially correct thing to do. Rather you should choose inexpensive entertainment when you know the financial strain will be too heavy on the boy.

In a public place a man never shaves nor buttons on his collar or tie. Why should a girl feel that she is privileged to comb her hair, powder her nose, put lipstick on her lips? A well-bred girl does all the necessary fixing at home or in the dressing room before she rejoins her companion. "Hands off" is a good rule to remember when it comes to hair, complexions, and lips.

If it is necessary for you to go to a dressing room when with an escort, don't be embarrassed. Say, in a matter-of-fact way, "Will you excuse me for a moment, I shall be back presently." Take it as a matter of course, and so will he.

A well-bred girl never yells or calls across aisles or seats in a theater nor in a public conveyance.

She does not wave at people in the street nor shout to them.

Any girl who has suffered through an evening with an escort who sniffles, bites his nails, chews gum, cracks his knuckles, sucks air through his lips noisily, reeks of cheap toilet water, is reminiscent of the "great unwashed", has bad breath, treats her familiarly, has only herself to blame if she finds herself in the same situation a second time. Are you guilty of any of the above sins against good taste? Check yourself.

UNIT 8. RECREATION AND ENTERTAINING IN THE HOME

What kinds of games did you plan for your group to play after supper on Sunday evening? Recent years have seen many changes in home recreation. After the World War people did little entertaining in the home. The night club, the restaurant, the country club, the road house satisfied, or seemed to satisfy, our desire to be noisy, active, and exuberant.

But then an old game was reintroduced — backgammon. It caught on tremendously. It represented a back-to-the-home-entertainment movement, apparently. Since that time there have been many re-entries of old games.

Anagrams, ping-pong, charades, jigsaw puzzles have vied with bridge in popularity.

To-day there is more entertaining at dinner in the homes than there was in the years previous to 1930.

Taffy pulls, hard-time parties, masquerades are back in favor.

Games like jackstraws, tiddly winks, and numerous educational card games are played night after night in some homes.

The radio has displaced the piano so largely that it is not easy to gather the group around the piano for an old-time sing. There seldom is a piano left in the home. But in homes where the piano has been kept, the crowd gathers in the same old way and enjoys "Sweet Adeline" and other close harmonies.

There are numerous testing games on the market — your skill at letter transposition, mathematics, close observation is tested in these games. Pencil-and-paper games are back in favor. Some of the newspapers run a "game a day" feature, showing the trend of the times.

When the automobile took the family touring the country, the family was being entertained in the home, for the home is where the family is. That place may be under an automobile roof, a hotel roof, or a roof tree of one's own.

But the years 1920 to 1930 saw an automobile for every member of the family, or saw the house used merely as a retreat for a few hours' sleep. Those years witnessed no recreation in the home, for no two members took their recreation together.

Now we are back in the home, getting recreation inexpensively, enjoyably.

The lean years taught us the value of the public lecture hall, the public library, the "pop" concerts, the organized community fiestas, stadium competitions, community flower shows, parades, and pageants.

When we could not pay for the symphony concert in the down-town music hall, we could listen to a symphony orchestra over the radio.

When we could not pay for the tickets to listen to a world traveler as he spoke in the lecture hall, we could sit at home and turn on the radio and listen to some other traveler tell of his experiences.

And as we listened we have kept our hands busy. Knitting, crocheting, embroidering, and quilt making have come back.

Women had hungry hands back in 1920 to 1930, but they did not realize it.

When the depression took away so many false trappings from our living standards, it revealed those empty, hungry hands. Needlework was the answer. Many a woman has knitted or sewed and eased away her fretful moods into the piece of handi-work has she been making. And from that handiwork has come a satisfaction as well and a knowledge that hands are still useful parts of one's anatomy.

Entertaining in the home may be for an evening or a month.

First, you may invite a guest to spend a summer or a month with you.

Second, you may invite a guest for a week-end stay, which usually means arriving some time Friday afternoon, staying over Saturday and Sunday, and leaving Monday morning.

Third, you may invite a guest to spend the day, arriving in the morning and staying through dinner and the evening.

Fourth, you may invite guests to a company breakfast. This is usually served at ten or ten-thirty. The menu is somewhat

like a luncheon menu, although soup and salad are omitted. The menu may be fruit, a hot egg or meat dish, toast or rolls, jams, conserves, relishes, and coffee.

Fifth, you may invite guests to luncheon. The hour is set at half-past twelve or one o'clock. The menu usually consists of soup or fruit for first course, an entrée with a vegetable, rolls, relishes, salad, dessert, and a beverage.

Sixth, you may invite guests for a dessert bridge. The guests arrive at about one o'clock. They have had their luncheon at home with the exception of the dessert. After that is eaten, you settle down for games or sewing and chatter.

Seventh, you may invite a group for the afternoon. Guests arrive at half-past two or three, have refreshments about four-thirty, and leave at five or six. This afternoon party may be given to honor a guest from out of town, to honor a girl by means of a shower, or merely to have recreation among a congenial group.

Eighth, you may invite a group for tea. As a rule, the hours are from three to five. Guests come and go, staying about one-half hour. They chat a bit, go to the dining room and enjoy tea and simple refreshments, then, after bidding their hostess adieu, take their leave.

Ninth, you may invite guests for dinner. The dinner hour varies from six to eight o'clock. The menu consists of four or five courses — soup or fruits, meat course with two vegetables, salad, and dessert with a beverage. Guests are due to arrive ten minutes before the hour set for the meal. They leave about ten or half-past ten.

Tenth, you may invite a congenial group in for the evening. They arrive about half-past eight and stay until midnight or thereabouts. Refreshments may be as simple as cookies and a beverage, or as elaborate as a hot dish, rolls, dessert, and a beverage. So heavy a meal always seems out of place.

Eleventh, you may invite girls for a "slumber party." The group arrive about half-past eight and leave the next morning after breakfast. This party seldom lives up to its name, for there is little slumber.

Twelfth, your relatives may invite guests to your "coming-out party." This party is given by parents or older relatives to

signify that you are now ready to take part in the social life of your group.

Thirteenth, guests may be invited to a wedding or to a wedding anniversary.

Time was when invitations were written or sent on engraved cards. No verbal invitation was considered correct, nor was there such a thing considered as extending an invitation by telephone. To-day the engraved invitation is used for a coming-out party, for a large tea, for an extremely formal dinner party, and for a wedding.

Invitations for a stay at your home are usually written informally and sent by mail. In these invitations the request is cordial, but definite dates for duration of the stay should be included.

Invitations for dinners are frequently written in long hand. When the written invitation is sent, there can be no excuse for muddling the date, the hour, nor the place.

When a formal invitation is sent and when an answer is requested or required, the answer is couched in the same phraseology as the original and placed on the sheet in the same position as was the original.

Any invitation that "requests the honor of your presence" requires the courtesy of an answer, even though an R. S. V. P. or "the courtesy of a reply is expected" are not on the sheet.

There is one other letter you should always write. It is called the "bread-and-butter" letter. It is sent to your hostess immediately after your return from a week-end or longer stay at her house. In this letter you express an appreciation that is real, genuine, and spontaneous. It is much easier to write it immediately after your return than it is to delay until the remembrance of your visit is weak.

In choosing personal stationery, select the kind that has the "well-bred" look. Bright colors, odd shapes, and flamboyant decorations are not used by the girl who possesses good taste.

In consideration for the persons who have to handle your letters, try to write legibly in ink that is either black or dark blue. Green ink and violet stationery may make an effective color scheme with a red stamp, but they also stamp the user as a person of little social sense and breeding. A lady is never conspicuous either by her acts of commission or omission.

CLASS ACTIVITIES

1. Make a list of forms of entertainment which you enjoy most. Do this for the other members of the family.

2. Keep a diary for a week, showing what you do in your leisure time. Criticize your own leisure-time program. If you were planning it for another week or for several weeks, would you do it differently?

3. Make a list of the things which the family might enjoy doing together. You might plan for one evening a month which the family could spend together. During the summer, one day a month or the family vacation might be planned for.

4. Make a collection of magazines which you consider most suitable reading for a family in your community. Describe the family or persons for whom each magazine will be most suitable. If you could choose just one for your family (the income being limited), which would you choose? What would be your two next choices and why?

5. What books would you like in your home library? List ten which you would choose if you might have just that number.

6. Plan a birthday party for a younger brother or sister. Decide the invitations to be given, what forms of entertainment would be suitable, what refreshments shall be served.

7. If your family follows the custom of having a guest for one meal during the week, decide on who shall invite the guest, who shall entertain him, and how the members of the family may share in his entertainment.

8. If your mother has very limited leisure time, what can you plan to do (if you can secure the coöperation of other members of the family) to give your mother time to do some of the things she most enjoys doing.

TEST: Ways of Providing Inexpensive Recreation for a Home

1. Use an outline similar to the one given here. Make a list of the forms of inexpensive entertainment which any one or all the members of your family might enjoy with you. List the form of entertainment and indicate which members of the

family might enjoy this pleasure. In the third column give the approximate cost of this form of entertainment per person.

ENTERTAINMENT WHICH FAMILY MIGHT ENJOY	WHICH MEMBERS OF THE FAMILY WILL ENJOY IT TOGETHER	APPROXIMATE COST PER PERSON

2. Make a list of ten books which your family might enjoy reading either alone or together if they were available from a circulating library.

3. If your family had ten dollars to spend for magazines and papers for one year, how would you spend it to provide the most pleasure for the greatest majority of the family?

4. Make plans for a family of limited means who wish to spend one evening together per week and to do so enjoyably and inexpensively. The plans should include every season of the year.

UNIT 9. BUDGETING THE EMOTIONS OR RELATIONSHIPS WITH OTHER PEOPLE

It is comforting to know that some of the friendships you have formed during the past few years will last all through life. The attachment may not be as strong as it is now, possibly not so violent, but it will remain through the years. To an old friend whom you have known since childhood, it is not necessary to explain your actions.

After you graduate you may not see the friend for years, you may not write more than once or twice a year, but whenever you do meet, you pick up the thread and go on chattering just as if you had met only yesterday.

That's real friendship. It is based on a spiritual community. That is, in things of the spirit you think essentially alike. You

have an understanding of the other person's virtues and her faults. She understands you. To other people in later years you will have to say, "You see, when I was young my family did thus and so," but you never have to explain anything to your friend. She knows; she grew up with you.

That deep understanding does not mean you grow sloppy or sentimental nor does it mean that you get a serious and churchy feeling inside when you are with her. You and she can giggle along like two little children. But your giggling is based on a viewpoint which sees a giggle in the same thing.

You may not go around casting sheep's eyes at one another, nor writing each other notes starting with "darling" and ending with "heart's beloved." You may even expend your affection for this girl by poking fun at her foibles. But you can do it because, fundamentally, you speak the same language.

Most girls go through a phase of adoration for an older girl or woman. That is perfectly normal. But when the affection changes to jealousy, when you are unhappy if your idol looks at another person, smiles on another girl, then it is time for you to play a stiff game of tennis, or work a hard problem in math, or get into a wrestling bout with your brother. You need to knock some common sense into your feelings.

You might just as well learn when you are young — for learn it sometime you must — that giving affection does not necessarily mean you will get it back.

You need to learn that feelings, like clothes, become outmoded and outworn. "The way of life is wonderful, 't is by abandonment."

Just because a girl professed great affection for you yesterday you have no right to expect that she will feel the same way day after to-morrow.

You need to learn that you can't win or hold affection by trying to compel it, by saying, "I have loved you all these years. You must, you just must, love me in return." Affections are not given that way.

Take your own case. If that funny girl in the other room should become fond of you, would she have the right to demand that you return her affection? "Why," you say, "I don't like

her. I can't help it if she likes me. I don't care for her, that's all."

You can love a person until you are willing to die for her or for him, but that great affection does not guarantee a return of affection from the one you love.

You can't make people love you. You can't make them keep on caring for you.

If you get all wrought up and upset over some friendship that has gone awry and that you thought was an everlasting affair, try to be philosophic about it. Just because the other person was dishonest, or unfair, or unworthy, does not mean your affection has been wasted. You are sorry you wasted so much on an unlovely person. Next time you will know better. Next time you will be a better judge of human beings, but, in the meantime, you have enriched your own life and you have learned sympathy and understanding so that you are going to be easier in your judgment of other people. Perhaps the white and the black are merging into the gray. Perhaps your unhappy experience will add tolerance to your character.

It is so easy to make the person we idolize into an idealized creature. Then when the idol falls by the wayside, we forget that the feet of clay had been there all the time, but that we idealized those feet and clad them in boots of the finest kid.

You need to learn that you can't make people over. It's useless to try. Younger folks — yes; they can be molded by precept and by example. But older folks are as set in their ways as you are in yours. It's a matter of live and let live.

You will have to learn that there are people with twisted and contorted ideas of right and wrong. There are moral weaklings who never can be strong. You will be disappointed in them. They will hurt you, but don't let them embitter you. Don't let them give you a warped outlook on life.

When a disturbing sand gets into the oyster shell, the oyster does not become a cross-grained curmudgeon and hope to die. He coats that grain with a substance which makes it a pearl, worth its weight in gold. So we ought to be able to do with our hurts and disappointments — turn them into a working philosophy that makes us easier to live with, more tolerant of others' failures.

Then there are the people who are always sorry for themselves. They are "so sensitive." Their feelings are always being hurt. They are always being misunderstood. All of us can claim we are misunderstood if we want to be so selfish. For fundamentally that's what the matter is with the sensitive person. She has never learned to think of anything except in relation to herself. She has never learned to think of any one but herself. She needs a new interest, a piece of work so big that it will take her out of herself. She needs to work so hard that she has n't time nor energy to brood over slights and wrongs. Most of the time the slights are not intended anyway.

People need to think less of themselves and more of the other person. You like Clara because she takes an interest in the play you are writing. You can't stand Miriam because she is always talking about herself and the boys who flock around her.

Miriam is centering her thought on herself and she bores you. Clara is centering her thought on you and your play, and you think she is great! Is n't there a key right there to that puzzling question — what makes a girl popular?

Is there any normal girl who does not want to be popular and does not wish she could draw friends to her like a magnet? We all have that desire. But few attain it. Why?

The popular girl is the one who forgets herself and enters into the lives and the activities of the others so freely that her interest is contagious.

If you don't dance, don't play games, don't swim, don't play tennis, don't read, don't crochet, you cannot hope to be at home with a dancing, game-playing, swimming, reading, or crocheting crowd. That's plain and simple. You need to "speak the same language" as the crowd.

If you play with that kind of a crowd and play their games badly, you won't be popular. On the other hand, you must not excel too often if there are boys in the group, for boys like to think they excel, especially in games calling for physical strength or agility.

PERSONALITY INVENTORY[1]

1. Can you get along with other people?

2. Do you keep your emotions under normal control?

3. Do you brood or sulk?

4. Do you like to mingle with other people? or do you prefer to stay by yourself like a hermit?

5. Can you recognize the good traits in other people?

6. Are you interested in what is around you? or are you bored?

7. Do you "day dream" of unreal, fantastic, and impossible things?

8. When you have the feeling that "the world is all wrong", can you analyze what is wrong with yourself?

9. Have you carried over from childhood any childish behavior traits such as jealousy, temper tantrums, being "mad at some one" spells, blue and moody spells, bad disposition, stubbornness, etc.?

10. Are you overly sensitive to criticism?

11. Do you face realities or run away from them?

12. Are you always on the defensive in your attitudes?

13. Do you try to adjust yourself to every situation?

14. Can you carry responsibilities without too much worry and without excessive strain on your nervous system?

15. Do you make yourself efficient, successful, and happy in whatever you do? or do you just worry through and fail to "put yourself over"?

16. Do you have an appreciation for the cultural things of life? or is this lacking in your life?

17. Do you harbor unnatural fears, such as being afraid of the dark or of thunder and lightning?

18. Are you exhausted physically and mentally at the end of the day?

[1] Reprinted through courtesy of Parent and Health Education Association, Cleveland, Ohio

19. Can you go to sleep at night within ten minutes after you are in bed?

20. Are you optimistic and cheerful at all times?

21. Do you feel that your daily program of living is cluttered with inconsequential things?

22. Do you have a proper balance of work, play, exercise, recreation, religion, study, and rest in your life?

23. Considering your own daily program of living, in which do you feel that you are lacking?

UNIT 10. THE GIRL AND THE MAN

Don't expect to be popular with boys if you discuss your latest "permanent" wave, the indecision you had before you chose your new dress, the catty way Eliza behaved, the marvelous time you had with the boy you "went with" last. Why should a boy be interested in any of those subjects? A girl might be spellbound over your "permanent" or dress decision, but a boy — never.

Don't expect to be popular with either boys or girls if you hold the center of the stage all evening. Try the stunt of having a good ear for listening.

Don't expect a boy to pursue you if you do all the hunting-down yourself. Don't wear out his patience with telephone calls. If you knew what boys say to their families when the family keeps on reporting that you telephoned and asked to have him call you back! If you have brothers, remember how they talk.

There will come a time, later on, when the boy will be just palpitating to have you call him, but that time does n't arrive until he is so deeply in love that he is foolish and has lost his ordinary common sense. He does n't lose it for any length of time, we might remark in passing.

The public press, school authorities, and parents become upset every so often over petting parties. Why? Because self-control is not one of the attributes of youth. Your parents tell you that no nice girl ever kisses the boys, ever lets them fondle her. So you make up your mind to be what you really want to be and what

Mother and Father know you are — fundamentally, a nice girl. But what happens? The boys date you once and never bother to do it again. You become alarmed lest you be a wall flower. Along comes a boy whom you like, and to hold him you break your custom.

If only you could know that by holding him temporarily you lose him permanently. That's the irony of it — in proportion as you grant him his desire you lose your hold over him.

There are boys who kiss and run and tell. There are boys who are cads with no intention of exerting self-control. And there are perfectly nice boys with every intention of staying nice boys who can't get hold of slipping self-control in a crisis and who rue it all their lives.

It's because of these dangers that older people, who have trod the paths you are treading, who have seen other people reap shame and sorrow, say, "Don't pet. Don't give yourself the chance to find how weak your self-control is."

When you are all thrilled over your ring that THE man has given you, you may want to tell all your friends at an announcement luncheon. The highest social authorities say that it is in much better taste for your parents to send a formal announcement to the newspapers.

These same social authorities believe that it is a waste of energy to attempt to find some "cute" way of announcing the engagement. If your friends are people you play around with, they have seen "his" devotion. No party announcement can surprise them.

The social authorities are very sure that runaway marriages, elopements, or delayed announcements of a marriage are not countenanced by the well-bred girl. Madame Grundy, being what she is, always manages to implant doubt in people's minds. "They say they were married last August, but have been keeping it secret! Hum, I wonder." "They say they eloped! Hum, I wonder why." "They say they were married in the town over the state line! Sounds well, but I wonder whether it is true."

It seems better to start married life with no questions or under no clouds. There are bound to be enough troubles, even in the most properly arranged affair.

If a girl hesitates to be married at home or in a church because of the cost, she ought to be willing to make her wedding simple, inexpensive, and still witnessed by the people who love her best — her parents. Runaway marriages are hard on parents. They try to put a bold face upon it, but there is a hurt inflicted there that not even time can completely efface.

No young man who urges a runaway marriage is going to make as considerate a husband as a girl deserves. If he were truly considerate, he would consider the aspersions that are bound to be cast upon any girl who runs away to get married.

When you are choosing the man who is going to live with you in "the house of your heart's desire", try to keep a firm hand on your common sense.

You think that your marriage will be the ideal one. You expect that he will always adore you, always think you are right, always defend you and stand up for you, always be chivalrous. He won't. Any more than you will live up to his ideal of you.

But you can both resolve to deal honestly with one another, to realize that adapting two personalities to each other is difficult and accomplished only by the spirit of "live and let live."

Don't hope to make him over. You don't want him to make you over, do you? Then why plan to do such a thing to him? If you are not in fundamental accord before marriage, you have slight hopes of becoming so after a few marriage vows have been said over you.

Unless you and he like the same kind of amusements, books, pictures, people, things — unless you and he are essentially in accord in religious matters, unless you have approximately the same spending and savings standards, you are headed for trouble.

Nature has a way of blinding the eyes and dulling the reasoning powers. She will do almost anything to attain her ends. Sex appeal burns with an intense flame and dies down to dingy gray ashes. Real love burns with a steady flame and glow. Sex appeal is like a bonfire fed with kerosene: it flashes up, burns hotly, and is soon out. Love is like a fire started with kindling, but maintained until life itself is burned out.

We spoke earlier of budgeting time, money, and energy. We hinted that we might consider budgeting emotions. How about

it? You love, you hate, you adore, you scold, you get temperish, you worry. Why not budget those? And when you have put in the allotted time for worrying or moping, you stop it. Fifteen minutes per day for moping is your allowance. You have put in the time, now "snap out of it" and try fifteen minutes jollying or singing. Don't spend all your time on one emotion — even loving is n't worth it.

PROBLEMS

Discuss the following situations. What suggestions do you have to offer so that a satisfying home life may result?

1. Ruth and John are planning to be married in June. John has been out of work for some time but has a job now at $20.00 a week. They have nothing saved, but feel they do not wish to wait longer to be married. Ruth has been living at home and has been well provided for. She thinks John has some money saved and that they will be able to live on his income. She is not overly strong physically and may have to hire some of her work done.

2. Elizabeth is a strong Catholic. She is much in love with a young man whose family are faithful attendants at a Protestant church. John has pretended that he will accept her religion should they marry. He really has no intention of doing this, as he knows his family would be strongly opposed. He is making a good salary and has saved sufficient money to start a home satisfactorily.

3. Mary has been left alone by the death of her mother. She has been considering marrying a man much older than herself. He is a widower and has a beautifully furnished home. He lives a very quiet life and entertains very little. Mary has lived quite a gay social life and is more interested in good times and parties than she is in staying at home. She thinks the widower's home will be a fine place to invite her young friends. The man realizes Mary's social ambitions but thinks that she will and should be satisfied to stay at home since he has such a beautiful place.

4. Alma has been raised in a large city where she has been accustomed to many conveniences. She spent this last summer in the country at an aunt's home. She was not well and her family thought the country would be beneficial in this respect.

She met and fell in love with a young man who lived on a neighboring farm. She wishes that he would come to the city for employment so that they could live there, as she is not so sure she will like the country in the winter. It is impossible for him to do this as his training has been for farm work. He feels she should be content where his work is.

5. Virginia and Jack have been engaged for five years. They have been saving regularly but have not accumulated enough as yet to set up a home such as Virginia has been accustomed to. Jack's income is not large but Virginia is insisting on waiting to be married until they can establish a home such as she has planned The type of home she has in mind is really much finer than they can afford on Jack's income. Jack is an orphan and has no home. He would be satisfied with a much simpler home. He is tired of living in a rooming house and getting his meals out. He feels his income is quite adequate if they start their home more simply and increase their expenditures as their finances permit.

UNIT 11. THE GIRL AND HER JOB

After you graduate from school you may plan to continue your schooling by going to college. Or your school may take the form of a position in the business world. Or your schooling may be that of life itself since you plan to marry soon. Until that time you are at home helping mother and assisting in community activities.

In any case your education is going on. It takes a different form, that's all.

Suppose you are trying to get a job in the business field. You need to be definite in your requests. Too many girls go to a prospective employer and say, when asked what work they want, "Oh! I don't know, most anything, I guess." That answer does a great deal to cause her to lose her chance for a job.

You may have your heart set on a definite position and may be too young, too inexperienced for it. But if you can say to your questioner, "I want to do so and so, ultimately. I suppose I shall have to learn all the steps first. I came to find out which step

I should take as a starter." That answer challenges the questioner and he is apt to get down to cases and work it out with you.

Too many girls have an exalted opinion of their abilities. You must expect a lowly job at the start. Climbing up is always more fun than climbing down. Start low, aim high, and work hard to reach the top.

When a girl makes an appointment and is late or breaks it entirely, when she flutters in, she usually finds herself fluttering out almost as quickly. Punctuality is a necessity in the business world, just as it is in school.

A girl who chews gum, slouches in her chair, wears spotted clothes, is frowsy looking, and never lifts her feet as she walks, stands a poor chance of getting work. All of those habits are indicative of character traits that are unwanted in the business world.

A girl who outstays her welcome, who does not sense that the interview is ended is apt to find herself without a position. Business men and women have no time to visit or to rehash statements made earlier.

If the position is offered, you show a decent gratitude, but let it stop there. Business offices are no places for the show of emotion.

When you report for work, bear in mind that there are three people to be considered in this new job.

First, your employer or employers.

Second, your fellow workers.

Third, yourself and your standards.

To satisfy your employer you must be punctual, efficient, loyal, able to refrain from talking business out of the office, able to take instructions and to follow them.

To work happily with your fellow employees you need to be fair in your divisions of work, considerate of their physical comfort, able to listen to gossip and not to repeat it nor to add your bit. You cannot afford to be a tale bearer nor a fault finder.

To satisfy your own standards you need to be honest in your work, free from distractions rising from personal telephone or office calls. You need to be well groomed, omitting too much complexion, too many jangling bracelets, too fussy clothes. You need to be physically fresh and able to work even if that means fewer night parties or week ends in the country or city.

You need to be emotionally stable so that nearness to a fellow worker or an employer does not upset your standards of conduct. Madame Grundy looks askance at lunches and evening parties with your employer. There may be no harm whatsoever in the episode, but Madame Grundy has a way of saying "Halt. That is n't done. Accepted conventions bar that."

Conventions seem stupid fences at times, but they do shut out a host of nasty complications that wreck lives and reputations. Better stay on this side of the fence and not tempt conventions too far.

CLASS ACTIVITIES

1. Your best friend is thinking of taking training to be a nurse when she leaves high school. She asks your advice. What would you tell her?

2. You have been thinking recently about what you would choose as a life work. You have decided that you would like to use your home economics in some way. What occupations might grow out of training along this line?

3. Each member of the class might read and report to the class concerning some different occupation. She might interview some one who is following this vocation. Several people may be asked to come in and talk to the class about the principles that might guide them in their choice of work. In these reports and talks the following points might be stressed:

   a. The requirements of the position
      (1) Physical
      (2) Intellectual
      (3) Personality required for success

   b. The opportunities and rewards if one chooses this line of work

4. After these reports or talks are given, each girl might analyze herself in the light of the requirements of the work which she thinks she would like to undertake.

5. Have a debate in class on this topic, "Every girl who graduates from high school should have at least one year of home economics." Interview former graduates of the high school who have had home economics or who have not had it. Find out if they

have used or could have used the information and abilities they might have acquired or did acquire in such a course.

6. Find out if you can what the needs of the woman in industry are at the present time. Do we need more laws giving women greater protection? Are women paid as well as men who do the same type of work? Why not? What needs to be done along this line?

7. What do you need to know about the laws relating to family life? How can you become an intelligent voter?

UNIT 12. GETTING ALONG WITH THE FAMILY

There have been times when you wished you were an orphan. When big Sister borrowed something of yours, when Brother teased you, when Father forbade you to run the car, when Mother refused to buy you the velvet dress — those were times when you wished you could run your own affairs. All of us have those moments. Thank goodness they are only moments, while there are hours and hours that we are glad we belong to a family.

There was the time when big Sister did your share of the housework for a week when you were practicing for the school play; the time when Brother said, "Want me to take you to the dance?" The time when Father said, "Well, daughter, I should say that a grade like that merits a special reward. How about a trip for a week this vacation?" When Mother said, "I don't believe your old dress will do for that party. We need to go shopping to get a new one." When Mother's eyes shone as she said to the family friend, "Really, I don't believe I could get along without Martha (that's you). She is the greatest comfort and help." Those are times when you are glad you belong to a family.

When Sister announces her engagement to the nicest man in town, when Brother's team wins the game, when Father is elected to the town council, when Mother is the new president of the woman's club — those are times when you are glad you have a family.

When you are scolded by your teacher, the girls may shun you and the boys may forget to telephone, but the family acts as if nothing were the matter until you are ready to tell them all about it — that's a time when it's grand to have a family.

When Christmas time rolls around and you go on secret shopping expeditions, when you help trim the tree, when you race downstairs in the morning to look in your stocking, when you see how much Brother likes what you have given him, when you find Sister has given you a string of beads — ah! there's another time it's nice to have a family.

Families are a refuge in trouble, a group to be proud of, a group that shares griefs and joys, a group that gives loyalty in unstinted degree.

In your sociology classes you trace the development and growth of the family. It has not always been this well-integrated unit. We are fortunate that we live in an age when the family stands for what it does. 'T was not always thus.

But since you take your family for granted, you sometimes forget that it is made up of individuals who deserve fine things at your hands.

In the first place you should show deference to your elders. That does not mean treating them as if they were hobbling toward the grave. It does mean that you should consider them in making your plans. When you realize that Father and Mother took care of you when you were a baby, a toddler, a mere infant, then surely you have a feeling that the least you can do in return is to give consideration to their wishes.

You say hotly, "Why should I? I did not ask to be born, did I? I am going to live my own life. They are fogies." Stop a minute, stop a minute. You may not have asked to be born, but you owe your existence to them. They stayed home from amusements that you might be kept safe and warm. They denied themselves pleasures, even foods they liked, that you might be well fed. They stayed up nights with you when you had illnesses. They saw gray coming into their hair, wrinkles on their faces as they worried over you when you were young. Is n't there some way you can repay them?

Grown-ups worry over their children because the grown-ups have trod the identical paths you are now treading. They may have slipped, they may have faltered, they may have seen friends go down to defeat. They want to save you. They want to smooth life's rough edges for you. That's why they say, "You must

not do that." "It is n't safe to do this." "No, I can't allow it." They may err, they may not trust you sufficiently, they may not realize that you are sensible of the danger, but remember they do it out of kindness. They do it to save you pain and shame.

What else do you owe your family? Coöperation. If there is just so much money to spend, you ought not to ask for more than your share. If there is work to be done, you ought not to shirk and slip out from under. You share in the family shelter and the family food, why not in the family work?

You owe your family loyalty. If your father has borne a good name in the town, you are n't going to let him down and make his name a byword. You can't, and be loyal to the family which is a part of yourself.

You owe your family courtesy and the observance of good manners. If you yell and shriek and act selfishly to the family, you will be forming habits that are unlovely. First thing you know, you will yell and shriek at the time when you want to make a good impression; and then how will you feel?

Really you are showing self-interest when you are good mannered to the family. You are practicing the gracious thing to do so that it comes naturally and then the outsiders say, "Is n't Martha a well-bred child? She never forgets her manners." How can you when they are a part of the woof and warp of your life? We are at home with good manners only when we live with them daily.

You owe your family cheerfulness and contentment. If you growl and grumble and feel sorry for yourself, you are forming a disagreeable habit. When you have your own home, you'll carry that same pout, that same whine, that same discontent into it. You can't be a disagreeable person for fifteen years and then change all of a sudden at eighteen or twenty. Your face is already marked by those sullen lines.

If you have a special talent for reading aloud, singing, acting, playing, and making especially nice dishes, you owe it to your family to share your talent with them. Who paid for your schooling? Your mother and father like to show you off and they like

to have you at home occasionally without your giving them the impression that the evening is a total loss as far as you are concerned.

Deference, courtesy, coöperation, loyalty, good manners, cheerfulness, and contentment cost not a red cent and yet you hesitate to spend them on the group who like you the most, who do the most for you — your own family.

CLASS ACTIVITIES

1. Write a description of the kind of home which you would like best to live in.

2. Can you, as one member of a family living in your present home, improve some of your own habits which might help to make your own home more like the ideal one which you have described?

3. Bring to class a poem or selection from a poem which portrays one or more satisfying phases of home life.

4. Be prepared to tell in class a story from a magazine or book which you think depicts some fine things in home life. You might read sections of this to the class.

5. Duplicate this tabulation on paper. Fill in, giving at least five things in each list:

SOME THINGS MY FATHER DOES FOR OUR HOME	SOME THINGS MY MOTHER DOES FOR OUR HOME	SOME THINGS I MAY DO	
		FOR FATHER	FOR MOTHER
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5.	5.

6. List the tasks you perform at home.
   a. Check those which you enjoy doing under a column headed xxx.
   b. Check those which you feel you should do because you feel it is your duty as a member of your home under a column headed xx.

c. Check those which you do only when you cannot get out of doing them under a column headed x.

Do this at the beginning of the unit and again at the end. Is there any change in the way the tasks are listed when you have completed this unit? Would a change show any difference in your attitude toward being a helpful, harmonious member of the home in which you live?

7. If you knew a young couple who considered being married, what could you tell them about the factors which they should take into consideration in order to build a satisfying home life?

8. Have a class discussion of some problem situations in which these factors were or were not taken into consideration when young people were married.

PROBLEMS

What would you do if:

a. your best friend believed that card playing and dancing are wrong? You do not think they are wrong if not done immoderately.

b. your mother does not do her housework as you had been taught it should be done in your home economics classes?

c. your sister does not choose the boy friend you think she should?

d. your grandmother does not like to have you dress like some of the more extreme girls in your class?

e. your mother wants the family portraits in the living room and you do not?

f. your brother is careless of his personal appearance?

g. you are a Catholic and your next door neighbor is a Protestant or if the situation is just the opposite, you being the Protestant and your neighbor Catholic?

h. you like to dance but your boy friend would rather go to a good show?

TEST: Appreciation of Ways of Preventing Family Friction

In the list at the left are found some suggestions for preventing family friction. In the list at the right you will find home situations in which friction has developed or is in danger of developing.

Read the situation in the right-hand column. Find in the left-hand column the suggestion or suggestions which you think would apply to this situation. Tell the class why you think friction could be or could have been prevented by these suggestions.

Sample situation: Mary has become extremely careless in the care of her room. She expects her younger sister to put the room to rights as she leaves for school later than Mary does. She also wants Ruth, the younger sister, to run all her errands for her. Ruth rebels occasionally; then their mother must intervene.

In this situation, family friction might be prevented by (*e*), dividing the labor and responsibilities justly, (*f*) the habit of putting things away, (*k*) children learning to wait upon themselves, and (*l*) children helping one another.

SUGGESTIONS FOR PREVENTING FRICTION IN THE HOME

a. A mutual understanding of the money available
b. A plan for maintaining the best possible standard of living within the income
c. Consideration for the time of other people
d. Sharing in family goals
e. Dividing the labor and responsibilities justly
f. The habit of putting things away
g. Prevention of fatigue of the home-maker
h. Loyalty to the group
i. Respect for the individuality of the members of the family
j. Consideration for the opinions of others
k. Children learning to wait upon themselves
l. Children helping each other

SITUATIONS

1. The Browns have a large family. Although Mr. Brown can well afford to provide Mrs. Brown with conveniences for working she has so few and so little help from the other members in the family that she gets tired and cross by night and is nervous and irritable with the rest of the group.
2. Mr. Knight has suffered severe financial losses recently. He has told his wife about them, but they have tried to keep this from the children. One son is in college and is continually sending home for money. He cannot understand his father's stinginess and complains

SITUATIONS

much about it. The daughter, who is in high school, is demanding that she have everything that her classmates have. This attitude of the children causes the parents much unhappiness.

3. Elizabeth Lane is a sophomore in high school. She has an older sister, Georgia, who is at home. Elizabeth feels that Georgia should do most of the housework and that her own (Elizabeth's) time should be her own when she is not in school. Georgia feels that this is unfair because she (Georgia) would like more leisure time. Many evenings at home are made miserable by their quarreling.

4. Rowena Harrison is being graduated from high school next June. She is very much in love with a neighbor boy. She is not interested in going on to college. Her parents would like her to have at least two years of college training. They are both college graduates. They realize the value of a college education even though a girl does not use it as a means of livelihood. Rowena does not feel her parents should interfere since they approve of the young man.

THE WELL-BRED GIRL AND HER SOCIAL RELATIONSHIPS

Books to Be Used as References

Allen, Betty, and Briggs, M. P., *Behave Yourself*, J. B. Lippincott Company, Philadelphia

Anonymous, *A Log Cabin Lady*, Little, Brown and Company, Boston

Barker, Mary Perin, *Good Manners for Young Women*, John Wiley and Sons, New York

Breen, Mary, *The Party Book*, A. S. Barnes and Company, New York

Brockman, Mary, *What Is She Like?* Charles Scribner's Sons, New York

Clark, M. E., and Quigley, M. C., *Etiquette Junior*, Doubleday, Page and Company, Garden City

Cottler, Joseph, and Brecht, Harold, *Careers Ahead*, Little, Brown and Company, Boston

Davis, F. G., and D. B., *Guidance for Youth* (Revised), Ginn and Company, Boston

Dennis, L. T., *Living Together in the Family*, American Home Economics Association, Washington, D. C.

Fedder, Ruth, *A Girl Grows Up*, McGraw-Hill Book Company, New York

Fleishman, Doris E., *An Outline of Careers for Women*, Doubleday, Doran and Company, New York

Gibson, Jessie, *On Being a Girl*, The Macmillan Company, New York

Groves, E., Skinner, E., and Swenson, S., *The Family and Its Relationships*, J. B. Lippincott Company, Philadelphia

Harris, Florence L., *Careers in Home Economics*, D. C. Heath and Company, Boston

Hathaway, Helen, *Manners*, E. P. Dutton Company, New York

Head, Gay, *Boy Dates Girl*, Scholastic Corporation, New York

Hunter, Lucretia, *The Girl Today, The Woman Tomorrow* (Revised), Allyn and Bacon, Boston

Irwin, John, *Manners and Personality in School and Business*, School and College Service, Delaware, Ohio

Jordan, Helen M., Ziller, Louise, and Brown, John F., *Home and Family*, The Macmillan Company, New York

Keir, Allisa, *So You Want to Open a Shop?* McGraw-Hill Book Company, New York

Keliher, Alice, *Life and Growth*, D. Appleton-Century Company, New York

Leuck, Miriam S., *Fields of Work for Women*, D. Appleton-Century Company, New York

Logie, I. M. R., *Careers in the Making*, Harper and Brothers, New York

Lutes, Della T., *The Country Kitchen*, Little, Brown and Company, Boston

Miller, Frances, and Laitem, Helen H., *Personal Problems of the High School Girl*, The Lakewood High School Print Shop, Lakewood, Ohio

Pictures of Family Life: Young People's Descriptions of Family Life, American Home Economics Association, Washington, D. C.

Pierce, Beatrice, *It's More Fun When You Know the Rules*, Farrar and Rinehart, New York

Post, Emily, *Etiquette*, Funk and Wagnalls Company, New York

Price, Hazel H., *Living with the Family*, D. C. Heath and Company, Boston

Prosser, C. A., et al., *Life Adjustments Series*, McKnight and McKnight, Bloomington, Illinois

Reid, Lillian N., *Personality and Etiquette*, D. C. Heath and Company, Boston

Stephenson, M. B., and Millett, R. L., *As Others Like You*, McKnight and McKnight, Bloomington, Illinois

Van Duzer, A. L., et al., *Everyday Living for Girls* (Revised), J. B. Lippincott Company, Philadelphia

Vogue's Book of Brides, Doubleday, Doran and Company, New York

Vogue's Book of Etiquette, Doubleday, Doran and Company, New York

Welshimer, Helen, *The Questions Girls Ask*, E. P. Dutton and Company, New York

MAGAZINES [1]

American Home
American Journal of Public Health
Better Homes and Gardens
Charm
Child Life
Child Study Magazine
Forecast
Good Housekeeping
Harper's Bazaar
House Beautiful, combined with *Home and Field*
House and Garden
Hygeia
Journal of Home Economics
Ladies' Home Journal
Mademoiselle
McCall's
National Parent-Teacher
Parents' Magazine
Practical Home Economics
School Arts Magazine
Seventeen
Vogue
What's New in Home Economics
Woman's Home Companion
You

[1] This list may be used as reference material for the various units.

LABORATORY PRACTICE

LABORATORY PRACTICE

I. THE WELL-FED FAMILY

There is no better place to practice the Golden Rule than in a food laboratory. Thoughtfulness, orderliness, good housekeeping, and an appreciation of time are the four laws of a well-conducted laboratory. Each teacher and class may have different ways of following these four laws, but followed they must be, if the laboratory is to be anything but chaos.

Thoughtfulness is shown in the fitting of yourself into the group activities. There is no real reason why you should always be first in getting supplies, elbowing others away in your haste and rudeness.

If you are cooking in large quantity one dish which will be shared by the group, thoughtfulness precludes your tasting the food from the mixing spoon and then putting it back in the food. The mixing spoon lifts a sample from the dish and transfers it to an individual tasting spoon, which is never put into the large quantity of food.

Orderliness is observed when you use some sort of tray or plate for carrying supplies from one part of the kitchen to another.

Orderliness is shown in the condition in which you leave the equipment. If everything is thrown helter-skelter into a drawer, it is hard for the next student to find what she needs.

Orderliness is shown in the way in which the dish towels are hung on the rack provided for them; in the way in which the supply closet shelves are kept.

Good housekeeping is shown in the care you take of utensils and equipment. Good housekeeping is evident in the dish washing you do.

Time appreciation is necessary if you are to get your work over in time to get to the next class without leaving a miniature hurricane behind you. Time appreciation enables you to keep up

with the rest of the class so that a common activity, such as baking or steaming, is not hindered by your tardiness in getting your mixture ready in time.

Dish Washing

There are a number of ways in which dishes may be washed and wiped satisfactorily. There is no one best way. Any good way is based on certain basic principles. These principles will apply either way we do dishes: in the old-fashioned way by hand or with the more sanitary and more satisfactory method of an electric dishwashing machine. Here are the basic rules:

Any dish washes more easily if food has not been allowed to dry on it. Hot water cooks starches and proteins of eggs. Therefore, dishes having these on them should be soaked in cold water.

The reverse is true of sugary and syrupy dishes. Dish water is most efficient if it is hot and soft with mild soapy suds. This suds is made most easily by using flaked soap or by swishing a bar of soap through the water until sufficient soap has been dissolved.

It is foolish to put unscraped dishes into clean dishwater. Therefore, a rubber scraper or crumpled paper wipes off all stray bits of food before dishes are put into water.

A dish pan filled to the brim with soiled dishes does not allow water to reach all parts of the dish. Therefore, only a few dishes are put in it at one time. There is less danger of dishes chipping if like shapes are put in at one time.

Ivory handles, or wooden utensils and handles, and iron cogs are harmed by standing a long time in hot water.

Glass is washed first, silver second, and china third.

A dish mop may be necessary to clean the inside bottoms of glassware. Glass cracks when subjected to extremes of temperature. Therefore, neither the washing nor rinsing water should be boiling hot.

Washed dishes are put into drying racks in such a way that the rinse water can reach them on all sides.

Linen towels leave less lint on dishes than do cotton ones.

Wooden ware needs to dry thoroughly in currents of air. Iron, tin, and steel need to be entirely free from moisture, lest they rust.

Wood absorbs water easily. Therefore, wooden working surfaces are wiped off quickly with lukewarm water and scoured with powder when necessary.

Powder is used to scour steel utensils.

Enameled ranges and other enameled surfaces are cleaned with warm soapy water. They are wiped dry to avoid streaks.

Sinks are cleaned and left spotless. Abrasive powders scratch fine porcelain surfaces.

Grease clogs drains and traps. Complete flushing of pipes with hot water is the last step in sink cleaning.

Towels are washed and hung to dry in orderly fashion. Dish towels and dish cloths are the better for frequent boiling.

Each class may have its own system or routine, but the processes as listed above are found in all good practice.

Care of Utensils

The materials used in kitchen utensils are varied — glass, tin, iron, steel, nickel, enamel, wood, copper, chromium, and aluminum.

Glass prepared for oven use needs little else than cleaning with soap and water. An occasional rubbing with steel wool or abrasive powders may be necessary. Such treatment removes the glossy finish, but in no way impairs the material.

Tin needs to be kept free from moisture. Acids eat into it. Washing in soapy water and scouring with mild abrasive powders take care of most of the difficulties. It is wise to wash acids off immediately, as they affect the tin. If tin is to be stored for any time, it needs a film of salt-free oil to prevent rusting. Salt draws moisture and moisture rusts tin.

Iron is best cleaned with hot, soapy water. It rusts and needs complete freedom from moisture, or if stored for some time, a film of salt-free oil or fat. It is not wise to scour the iron frying pan too vigorously, for this removes the film of fat that keeps it from rusting.

Steel rusts and is spotted by acids If kept free from spots by the use of scouring powders, if acids are not left on it, or more moisture allowed to accumulate, steel has a long life and a useful one.

Nickel needs little more than washing with hot, soapy water. Rubbing with a dry cloth brings back any polish.

Enamel is nothing more than a thin sheet of glass fused on a metal base. It should be treated like glassware.

Wood needs scraping with a dull-edged blade and washing with cold or lukewarm water. Hot water causes the wood to swell and warp.

Copper. If your copper ware is lacquered, no polishing is necessary as long as the lacquer remains intact. If it is a decorative piece which requires little or no cleaning, the lacquer will remain on indefinitely.

For beverage sets the trick for preserving the lacquer is simply to avoid very hot water in cleaning. A quick cleaning in warm water or suds is sufficient. Long standing in hot water will expand the metal and crack the protective coating. The lacquer itself is impervious to fruit acids or any beverages which one may care to use.

Some people prefer the mellow hue of aged copper. To obtain this, we remove the lacquer and expose the bare copper to atmospheric conditions. Lacquer is very easily removed by covering the piece with boiling water and allowing it to stand until the water is cool or until the lacquer is loosened.

With cooking utensils it is necessary to remove the lacquer before using. Employ the same method for removing. Pieces that are used a lot, of course, require considerable polishing. You may use any of the polishes now sold for the purpose or you may mix your own cleaning paste from your own pantry shelves. Just take equal parts of salt, vinegar, and flour. Mix this to a paste and rub the surface. Tarnish and discoloration disappears very quickly. Then wash in clean, hot suds, scald, and dry thoroughly with a clean, dry towel.

Chrome. Chrome, with its deep blue lights, has a rich glow all its own. Chromium-plated articles need only to be polished with a soft cloth. Care should be taken, in the case of teakettles, not to allow the utensil to boil dry, but the same precaution should be taken with any utensil in any material.

Aluminum. Starting with a bright new utensil, the original lustre can be kept indefinitely if the utensil is washed only in clean, mild suds (strong alkalies dull the polish), then scalded, and dried with a clean, dry towel. No more, no less, than good dishwashing rules for cleaning china or silver, and just as easy.

Of course, the problem of removing dried-on food or something burned presents itself at times for any cooking utensil. The easiest procedure, and by far the most satisfactory for aluminum, is to fill or partly fill (just so the portion to be cleaned is covered) the utensil with water. Place the utensil on the stove and bring the water to a boil. This is usually sufficient to loosen the adhering particles. In case of long standing, or where food has been severely burned on, a little longer boiling is required. The utensil may then be washed in the recommended way. Scouring with abrasive cleaners is seldom necessary.

Sometimes a dark deposit forms on the inner surface of the utensil after certain foods are cooked in it. This is simply a small mineral deposit, usually an oxide of iron. If you want to capture this straying nutrition, just leave it on until you have occasion to cook some acid food in the same utensil and "presto" your pan will again be bright as new and you will have had your iron in the rhubarb or the tomatoes. If, on the other hand, your soul craves immediate action, you fill the utensil with water and add one teaspoonful of cream of tartar for each quart of water used. Bring the water to a boil and boil until bright. It requires only a few minutes. The water in some localities will leave a dark stain on the inner surface of the teakettle. This is a deposit of lime and iron, which is quite harmless. It thickens with continued use and becomes a thick coat of lime. The best way to avoid this coating is to wash the teakettle frequently. Just plunge it into warm sudsy dish water and scrub the inside well. If you have a teakettle which has already taken on a thick lime coat, fill it with a strong solution of vinegar and water (about half and half) and allow it to come to a boil. Then allow the teakettle to stand with the solution in it for several hours or, better still, over night. The deposit is softened so that it may easily be scraped off. A wooden spoon is best for this purpose.

Certain alkalies act as solvents of aluminum. Salts of soda, sal soda or baking soda, which are sometimes used for cleaning, are not desirable for this purpose. Certain highly seasoned foods, or foods with a high concentration of mineral salts, sometimes cause the formation of tiny pits or holes. Pitting is most often caused by allowing such foods to stand for several hours in the

utensil or by soaking utensils for a long time to facilitate cleaning. By using the "easy-clean" methods suggested there is no need for soaking at all.

There are cleaning materials of all kinds on the market. As far as aluminum is concerned, they might all be classified under four heads. The soaps, of course, come first. Mild or only slightly alkaline soaps are best. The stain removers are for use on the inside surfaces. The scouring powders and steel-wool pads, some with and some without soap, may be used on inner surfaces of aluminum utensils, but should never be used on the polished surfaces. The polishes, creams, liquids, pastes, or cloths treated with polishing materials are for use on polished surfaces and may be used to restore the sheen.

Terms Used in Cookery

A bride who had earned a Phi Beta key in college found that cookery books spoke a language entirely new to her. Her book told her to separate the eggs, whip the cream, beat the eggs, smother the chicken, cut and fold in stiffly beaten egg whites. The book spoke of basting a roast, flouring a cake pan. Cooks have developed a "jargon", a trade language or "patter", all their own.

Beating, whipping, and smothering are not cruelties when applied to foods even though they sound unfeeling and harsh.

Fortunately you are in a class where technique may be demonstrated.

After watching your teacher, can you describe the difference in beating, whipping, stirring, cutting, and folding-in?

Kneading is an operation easy to follow when seen in demonstration. It is quite different from the motions used in rolling.

Here are a few additional terms: paring, peeling, coring, grating, shredding, chopping, pulping, sieving, rolling, baking. Can you demonstrate and describe each one?

Meat cookery has a terminology all its own.

Exact Measurements

In measuring, we sift flour before we measure it. This is done because flour settles on standing. The standard measuring cup holds sixteen tablespoons. A variation as great as three table-

spoons in one cup may be found in flour which is taken from a container where the flour has stood undisturbed for weeks and in a cup of flour which is measured directly after sifting. Sift, measure, and sift is the rule.

To measure a spoonful of any dry substance, the spoon is dipped into the ingredient, brought up heaping full. Then the top is leveled, using the flat side of knife or spatula blade.

One-half spoonful is measured by making a longitudinal cut down the center of the spoon. Why not crosswise?

One-quarter spoonful is measured by removing one half first and then making a horizontal or crosswise cut across the remaining part. Why crosswise in this case?

Solid materials like butter or shortenings are better weighed than measured. The same is true of dry ingredients, although we have n't trained ourselves to do that yet.

If butter comes in quarter-pound sections, a little applied arithmetic tells you that since there are two cups of butter to a pound, one quarter-pound equals one-half cup. And one-half cup equals eight tablespoons. Therefore, one quarter-cup of butter equals four tablespoons or one-half of a quarter-pound section.

Some cooks fill a measuring cup with water and then put in shortening or butter until the desired amount of water has been displaced. This method is not to be recommended. Why?

If the same measuring cup is to be used for dry and wet ingredients, which one should be measured first? How would you work it?

If a recipe calls for one-half cup of sugar and one-quarter cup of molasses, which ingredient goes into the cup first? Why? Can the cup hold the two ingredients at the same time?

Suppose you wanted to measure molasses and melted butter? Which one goes into the cup first? Why?

RECIPES

BEVERAGES

(See discussion of beverages on pages 67–71 for further suggestions.)

COCOA

¼ cup sugar	1 cup water
¼ cup cocoa	3 cups milk
⅛ teaspoon salt	¼ teaspoon vanilla

1. Put sugar in measuring cup. Add cocoa, then salt. Put into a saucepan. Add water. 2. Boil for ten minutes. 3. Heat milk in double boiler. 4. Add the cocoa paste to this. Cook twenty minutes in double boiler. 5. Add vanilla.

By putting the sugar in the measuring cup first and then adding the cocoa there is less waste, since the grains of sugar brush out the softer, finer grains of cocoa.

Cocoa may be dressed up by using a marshmallow or a spoonful of whipped cream to top each cup.

TEA

1 cup water	1 teaspoon tea

1. Bring water to boiling point. 2. Put tea in dry, warmed teapot. When water is boiling, pour it over the tea. 3. Let stand in warm place for five minutes.

Tea bags, holding enough tea for one serving, may be purchased. The bag may be of cheesecloth or of perforated cellophane.

COFFEE

1 cup water	2 tablespoons ground coffee

This amount makes one cup.

Coffee may be prepared by boiling, percolating, or dripping.

Boiled Coffee

Boiled coffee, well made, has a rich, full flavor.

1. Mix the coffee with a small amount of cold water. Add washed, crushed egg shell. 2. For each cup of coffee desired, add two-thirds cup of boiling water. Let the mixture come to a boil

and boil for three minutes by the clock. 3. Pour one-quarter cup cold water down the spout. Stuff crushed tissue paper in the spout and let coffeepot stand where it will keep warm, but where beverage will not boil, for twenty minutes. Serve.

Percolated Coffee

Follow the directions given with the percolator you are using. There are two types of percolators and the method of making depends upon the type used. Most percolated coffee is cooked too long, the percolator is not kept clean, the oils in the coffee are deposited in the small percolating top, where they become rancid, spoiling the flavor of the beverage.

Drip Coffee

Drip coffeepots may be of aluminum, glass, or china. Many coffee experts believe the best coffee is not made in metal containers. However, authorities differ. In drip coffeepots there are usually two perforated filters. The first one has very small holes. It is in this compartment that the finely ground coffee is placed. The second filter, which has enough room to hold all the boiling water, has larger and fewer holes. The purpose of this filter is to spray the boiling water slowly upon the dry coffee. As the water drips through, it carries with it the soluble part of the coffee bean and some of the essential oils. Very little caffeine is extracted when coffee is made this way. The main difficulty with drip coffee comes in keeping it hot. By pre-heating the container and by placing the coffeepot on a hot warming oven this difficulty is obviated.

Drip coffee has a vivacity and sparkle which may be procured in no other way.

CHOCOLATE

2 squares chocolate	3 tablespoons sugar
1 cup cold water	3 cups milk
1/8 teaspoon salt	

1. Cut or shave chocolate into small bits. 2. Place chocolate and water in upper part of double boiler over direct heat. Stir

until chocolate is melted and blended. 3. Add salt and sugar. Boil four minutes, stirring constantly. 4. Place over hot water. Add hot milk gradually, stirring constantly. 5. Serve immediately.

Top each cup with one teaspoon whipped cream if desired.

CREAMED GINGER ALE

1. Put two tablespoons coffee cream in each tall glass. 2. With great care pour cold ginger ale over the cream until the glass is three-quarters filled. This fizzes a great deal. Do not pour the ginger ale recklessly. 3. Serve at once.

Root beer or sarsaparilla may be used in place of the ginger ale.

LOGANBERRY PUNCH

2 cups boiling water
½ tablespoon Orange Pekoe tea
1 cup loganberry juice
juice 2 lemons
juice 2 oranges
⅔ cup sugar
few grains salt
1 pint ginger ale
small bunch mint

1. Pour boiling water over tea. Let stand ten minutes, then strain. 2. When cool, add loganberry juice, lemon juice, orange juice, sugar, and salt. 3. Chill. 4. Pour over block of ice, in punch bowl. Add ginger ale and mint sprigs.

ORANGE NOG

⅔ cup evaporated milk, chilled
⅔ cup ice water
6 tablespoons sugar
2 cups orange juice, chilled

1. Combine ingredients. Beat well, or shake vigorously in a covered container. 2. Serve immediately with chipped ice.

RASPBERRY SHRUB

2 quarts red raspberries
sugar
1 cup cider vinegar

1. Put berries in a colander. Let cold water run over them lightly. Drain. 2. Spread on a large enameled tray. The enameled drip pan of the gas stove is excellent. Set in a cool

oven — not more than 250° F. After the berries have been in for ten minutes, pull the tray out and mash the berries lightly with a spoon. Put the tray back in the oven for thirty minutes. The heat should be so low that it does nothing but set the juice running. 3. Put the fruit in a jelly bag. Squeeze out the juice. 4. Measure it, counting the cups. 5. Measure one-quarter as many cups of sugar. Add to juice. 6. Boil the sugar and juice for fifteen minutes after it begins to boil. 7. Add cider vinegar. Boil for ten minutes. 8. Pour into hot, clean jars, capping at once.

To serve — dilute. Use one-third shrub and two-thirds water and chipped ice.

MULLED CIDER OR GRAPE JUICE

2 cups cider *or* grape juice	2 inches stick cinnamon
2 whole cloves	

1. Combine ingredients. 2. Simmer five minutes. 3. Strain. Serve hot.

EASILY MADE GRAPE JUICE

1. Wash Concord grapes. Pick from stems. Into a clean quart jar put one to two cups grapes. Do not skin or seed. 2. Add from three-quarters to one cup sugar. 3. Fill the jar to overflowing with boiling hot water. Partially seal. 4. Process in 275° F. oven for thirty minutes. 5. Complete the seal.

This juice is ready to drink after six weeks' standing. Strain the grapes from the liquid. The juice has a particularly fresh, sparkling flavor.

TOAST

BREAKFAST TOAST

1. Cut slices of bread one-third inch thick. Do not remove crusts. 2. Toast in electric toaster, or in a slow oven, or under broiler flame. 3. Butter after toasting, if desired.

MELBA TOAST

1. Cut bakers' bread into one-quarter inch slices. 2. Remove the crusts. 3. Place in a slow oven (250° F.). Let the slices

remain in this low heat until they have curled, the color has changed to a sun-tan, and the bread is so crisp it breaks almost at a touch.

FRENCH TOAST

2 eggs	1/8 teaspoon salt
1 cup milk	6 slices bread
1 tablespoon sugar	1 tablespoon butter

1. Beat eggs slightly. Add milk, sugar, and salt. Mix. 2. Pile bread in deep bowl. Pour liquid over. 3. Melt butter in heavy frying pan. Sauté well-drained slices, first on one side and then the other.

ORANGE TOAST

1. Cut slices of bread one-third inch thick. 2. Toast lightly. 3. Butter generously. Spread with a mixture of sugar and grated orange peel. Use one tablespoon of peel for one-half cup of sugar. Sprinkle a few drops of orange juice on top of the sugared toast. Set back under the broiler flame until the sugar mixture bubbles.

Instead of the orange rind and juice, a mixture of cinnamon and sugar, in the proportion of one tablespoon of cinnamon to one-half cup of sugar, may be used.

Chopped, drained, canned pears may be served with cinnamon toast.

FRUITS

(See discussion of fruits on pages 55–56, of desserts on pages 103–104, and of desserts using gelatin on pages 144–145 for further suggestions.)

Well-ripened fruit is at its best when served uncooked, but for variety we combine it with other foods. These combinations may be uncooked as in fruit salads, ice creams, and gelatin dishes, or cooked as in some puddings or other desserts or fruit courses.

Most fruits when served raw are improved by chilling. An example is a melon, an exception is a banana. All fruit when served raw should be well washed before being sent to the table. This applies to berries, to the skins of more solid fruits, the peel of citrus fruits, and the rind of melons.

Apples and pears are seldom used in frozen dishes. Pineapple must be cooked to combine successfully with gelatin.

With these exceptions it is safe to say that fruits are versatile and may appear in desserts of all types as suggested in the earlier parts of the book. That versatility explains the few fruit recipes in this book. Type or basic recipes are given or suggested and may be used with almost any fruit which is seasonable or desired.

ORANGES AND GRAPEFRUIT

Wash the fruit before preparing it for the table. After cutting fruit into halves, the juice may be extracted. This may be strained if desired. In any case the seeds are removed. Since exposure to the air makes the juice bitter it is best to chill the fruit and then to extract the juice at serving time. Vitamin C potency is decreased when the juice containing it is exposed to the air.

The fruit may be cut into halves and each side of a section separated from the tough white segment with a sharp knife. With scissors or a grapefruit corer the pithy center and seeds are removed.

An orange may be pared like an apple. A sharp knife separates the sections from the connecting tissue and frees the sections from the core. These sections may be arranged in whorls on fruit plates.

POACHED FRUIT COMPOTES

Well-washed plums, halved peeled peaches, and pared, cored halved pears are cooked in a light sirup until the fruit is partially softened. This semi-cooked fruit is chilled and served with a little of the sirup. Use one part sugar to three parts of water for the sirup.

BAKED APPLES

1. Wash and core sound apples. 2. Place them in a baking dish. 3. Fill the core cavities with seeded raisins, brown sugar, and a little butter; or with citron peel, butter, and sugar; or with mince meat. 4. Put enough water in the dish to cover the bottom. 5. Bake the fruit in a 350° F. oven until the apples are well cooked.

Girdling the apples and removing the peel around their diameters will sometimes help them to keep their shape.

BAKED PEARS

1. Choose winter or late pears. Wash, but do not core, sound pears. 2. Put in baking dish. Half fill the dish with a light sirup to which you have added a little stick cinnamon or ginger sirup. 3. Set baking dish in a 350° F. oven. Remove the pears when tender. 4. Cook the sirup down until quite thick. Maple sirup may be used. Pour this over the baked pears. 5. Serve the pears cold.

PINK APPLE SAUCE

1. Choose red-skinned, tart apples. Wash, quarter, core but do not pare them. 2. Put them in saucepan with a small amount of water. 3. Cover the saucepan and cook until the fruit has lost its shape. 4. Put the sauce through a sieve. Add sugar to taste. If the color seems too faint, add a few cinnamon candies with the sugar. Stir well and reheat the sauce. 5. Serve hot or cold.

CRANBERRY SAUCE

4 cups cranberries
2 cups water
2 cups sugar

1. Wash and pick over the cranberries. 2. Add water and cook until the berries pop. 3. Add sugar and cook for five minutes. 4. Serve cold.

Or make a sirup of sugar and water and cook the fruit in it for ten minutes.

CRANBERRY JELLY

4 cups cranberries
1 cup water
2 cups sugar

1. Wash and pick over the cranberries. 2. Cook with the water until the berries pop. 3. Put the mixture through a sieve, being careful to work all the pulp through. 4. Put the purée back on the fire, bring to a boil. Add the sugar and cook for two or three minutes. 5. Mold and serve cold.

CEREALS

(See discussion of cereals on pages 56–58 for further suggestions.)

It is wise to follow the directions for cooking given on the container which holds the cereal.

Place the upper part of the double boiler with its salted, boiling water over the flame. Sift the cereal in gradually, stirring constantly and continuing the cooking until the mixture thickens. Now set the upper part of the double boiler into the lower part of the double boiler, which is half filled with boiling water. Cooking continues the required time. Stirring at this stage is unnecessary.

Cereals which need cooking are those which are ground, flaked, cracked, or left whole.

In the first class we have cornmeal, Ralston's, Cream of Wheat, Wheatena, Farina, and Maltex.

In the second class we have Pettijohn's, rolled oats, flaked wheat, and flaked rice.

In the third class we have both whole and cracked wheat, rice, hominy, steel-cut or Scotch oatmeal, and barley.

Starting with a unit of four cups of water which requires one and one-half teaspoons salt, possibly a little more, use two-thirds to one cup of granular cereal; or one and one-third to two cups of flaked cereal; or one to one and one-third cups of whole or cracked or steel-cut grains.

Left-over cereals may be molded in smooth-bottomed containers that have been rinsed out with cold water or brushed lightly with butter. Cornmeal mush is frequently cooked only to be molded. After it is cold it is sliced and sautéed. Into the cornmeal mush as it cooks may be put cooked sausage meat. This blends with the mush and adds flavor when the mush is sautéed.

EGGS

(See discussion of eggs on pages 58–61 for further suggestions.)

SOFT-COOKED OR CODDLED EGGS

1. Have a saucepan with enough boiling water in it to cover completely the eggs which will be cooked in that water. Put the

eggs in. 2. Turn the fire so that the water is not boiling vigorously. 3. If extremely soft eggs are desired, take them out at the end of three minutes. To get an egg in which the white is soft — but jellied — the yolk being of practically the same consistency, take the egg from the water at the end of five minutes.

HARD-COOKED EGGS

1. Put the eggs in a saucepan with enough cold water to more than cover them. Put this over the fire. 2. Let the water come to the simmering point and remain there for forty minutes. 3. Remove at the end of that time. This gives eggs with a firm — but not tough — white and yolk.

SCRAMBLED EGGS

6 eggs	3 tablespoons butter
6 tablespoons milk	½ teaspoon salt

1. Wash the eggs. 2. Break, one at a time, into a bowl or saucer. After the egg has been broken, slip it into the upper part of a double boiler. By breaking each egg separately it is easy to take out any which may be spoiled. 3. To the eggs in the upper part of the double boiler add the milk, the butter, and salt. Cook in the upper part of the double boiler over boiling water, stirring constantly. Scrape the egg from the bottom of the pan until the mixture is creamy. The egg mixture continues cooking even when taken from the fire, so remove while still creamy. 4. Serve as soon as possible.

Garnish with parsley, or with quarters of small, chilled, peeled tomatoes.

PUFFY OMELET

4 eggs	pepper to taste
4 tablespoons milk *or* water	2 tablespoons butter
½ teaspoon salt	

1. Beat the egg whites until dry. 2. Add the egg yolks, the milk, the salt, and the pepper. Beat lightly. 3. Melt the butter in a heavy frying or omelet pan. Pour the egg mixture into the pan and set over a low fire. With a spatula cut down into the

mixture at frequent intervals. This allows the uncooked egg at the top of the pan to reach the bottom. After approximately five minutes' cooking the omelet has risen to the height of about one inch. 4. Set in an oven heated to 300° F. Cook until the top of the omelet is firm and has lost its moist appearance. 5. With a spatula or knife make a cut across the omelet at right angles to the handle. Fold the omelet at this cut. 6. Slip from the pan onto a hot platter. 7. Serve at once.

This omelet is delicious served with strawberry jam. Or, before it is folded, one or two tablespoons of hot buttered peas, or thick creamed chicken, or fresh mushrooms — which have been sautéed in butter until tender — may be added.

POACHED EGGS

Poached eggs that stand about one-inch high may be obtained by following this method: 1. Use a small, but deep, pan. The upper part of a double boiler is good. 2. Fill to within three inches of the top with rapidly boiling water. Add one-half teaspoon salt to the water. 3. Break an egg into the water. 4. Reduce the temperature so that the water is now simmering. With a spoon agitate the surface of the water so that it forms deep circles. 5. At the end of three minutes the egg may be removed.

DEVILED EGGS

1. Hard-cook the eggs according to the directions given previously. To avoid that greenish discoloration which is sometimes found in hard-cooked eggs where the yolk touches the white, plunge the eggs into cold water immediately after taking from the saucepan. This diffuses the ferrous sulfide.

2. Shell the eggs, holding them under cold running water during the process. 3. Cut the eggs into halves — crosswise or lengthwise. 4. Remove the yolks. Mash and season highly. This seasoning may be salad dressing, deviled ham, Worcestershire sauce, melted butter, cream, onion juice, finely chopped green pepper, or olives. Mix the ingredients, choosing some but not all of those suggested in the sentence above. 5. Refill the egg-white halves, heaping the mixture in roughly.

If desired, the yolk mixture may be put in with a pastry tube or the mixture may be smoothed at the level of the egg white and the two halves put together. Protect the egg white by wrapping tightly in waxed or parchment paper. The egg whites turn brown on exposure to the air. Wrapping precludes this happening.

WATER-GLASS EGGS

1. Use earthenware, glass, or stone crocks. Do not use metal. Scald crock. Drain. 2. Boil ten quarts of hard or soft water. Cool and put into crock. 3. Add one quart best grade of dry or liquid water glass to cooled water. Stir thoroughly. 4. As eggs are gathered in the spring they may be put into this solution, which is of the consistency of molasses. The eggs should be completely covered.

Water glass solution should not be used a second year.

Size of Jar	Egg Capacity	Solution Necessary
2-gallon jar	65–80 eggs	7½ pints
5-gallon jar	160–200 eggs	18½ pints
10-gallon jar	320–400 eggs	36½ pints

HOT BREADS

(See discussion of hot breads on pages 61–67 for further suggestions.)

BAKING-POWDER BISCUITS

Temperature: 425° F. Time: about 12 minutes

2 cups all-purpose flour
2 to 3 teaspoons baking powder
½ teaspoon salt
4 tablespoons butter
⅔ cup milk

1. Sift, measure the flour. Add the baking powder and salt. Sift again. 2. Work the shortening into the flour with the tips of the fingers. Do it lightly and quickly. 3. Add the milk. Stir quickly until the mixture thickens. 4. Turn the dough onto a lightly floured pastry board. Knead it lightly for about twenty seconds. Shape the mixture with your hand or a rolling pin into a sheet one-half to three-quarters of an inch thick. 5. Dip the biscuit cutter into flour. Cut a biscuit. Dip the cutter into the flour again and repeat the performance. 6. Place the biscuits on a baking sheet or in a pie plate. If biscuits with "crusty" crusts

are wanted (and they should be), place the biscuits about one inch apart. 7. Set in a preheated oven, placing the baking pan on the rack about three inches from the bottom of the oven. Bake the required time.

CORNMEAL ROLLS

Temperature: 425° F. Time: about 15 minutes

- 5/8 cup all-purpose flour
- 3/8 cup cornmeal
- 1/4 teaspoon salt
- 1 teaspoon sugar
- 2 teaspoons baking powder
- 1/2 cup milk
- 2 tablespoons butter

1. Mix and sift the dry ingredients. 2. Add the milk and the melted butter. 3. Roll on a lightly floured board. 4. Cut into rounds. Brush with melted butter. Shape each round like a Parker House roll. 5. Bake in a preheated oven the required time.

GRIDDLE CAKES

- 1 1/4 cups all-purpose flour
- 2 1/2 teaspoons baking powder
- 1/2 teaspoon salt
- 1 egg
- 1 cup milk
- 1 tablespoon shortening

1. Sift and measure flour. Add the remaining dry ingredients and sift again. 2. Beat the egg. Add the milk and melted shortening to it. 3. Make a well in the dry ingredients. Add the liquid. Stir twenty seconds. 4. Have the griddle hot, greasing it by putting a piece of salt pork or suet on a fork and rubbing it lightly over the hot griddle. There should be just enough fat on the griddle to form a thin film. 5. Pour the batter from a pitcher, having approximately two tablespoons of batter for each cake. 6. When the cake bubbles over its entire surface and looks a little crusty around the edge, turn it with a pancake turner. Do not turn the cakes more than once. 7. Serve while hot.

MUFFINS

Temperature: 425° F. Time: about 20 minutes

- 2 cups all-purpose flour
- 1 tablespoon sugar
- 1/2 teaspoon salt
- 3 teaspoons baking powder
- 1 egg
- 1 cup milk
- 2 tablespoons shortening

1. Sift and measure flour. Add the dry ingredients and sift again. 2. Beat the egg without separating the yolk from the white. Add the milk and the shortening, melted. 3. Combine mixtures, stirring just enough to blend the wet and dry ingredients. Stop stirring even though the mixture has a rough appearance. 4. Pour into oiled muffin tins, filling them about two-thirds full. 5. Bake in a preheated oven for the required time.

WAFFLES

1½ cups pastry flour
¼ teaspoon salt
1 tablespoon sugar
2 teaspoons baking powder
2 eggs
1 cup table cream
4 tablespoons melted butter

1. Sift and measure flour. Add the dry ingredients. Sift again. 2. Separate the eggs. 3. Beat the yolks. Add the cream. 4. Stir into the dry ingredients. 5. Add the melted butter. 6. Fold in the egg whites, stiffly beaten. 7. Follow baking directions which come with waffle iron.

This mixture improves by standing in the refrigerator for two to twelve hours.

POPOVERS

Temperature: 450° F., 15 minutes
350° F., 30 minutes
Time: about 45 minutes

1 cup all-purpose flour
¼ teaspoon salt
1 cup milk
3 eggs
½ tablespoon butter

1. Sift and measure flour, add salt, and sift again. 2. Add milk gradually, making a smooth batter. 3. Beat eggs until light. Add. 4. Melt and add butter. Beat until smooth. 5. Pour into greased deep pans; heavy ones are better than lightweight aluminum or tin. 6. Set in a preheated oven for fifteen minutes; reduce temperature and continue baking for the required time.

GINGERBREAD WAFFLES

- 2 eggs
- ¼ cup sugar
- ½ cup molasses
- 1½ cups cake flour
- ½ teaspoon ginger
- ½ teaspoon salt
- 1 teaspoon baking soda
- 1 teaspoon baking powder
- 1 cup sour milk
- ½ cup melted shortening

1. Beat the eggs. Add the sugar and the molasses. 2. Sift and measure the flour. Combine dry ingredients, sift again. 3. Add the flour mixture and milk alternately to the egg-sugar-molasses mixture. 4. Beat until smooth and add the shortening. 5. Bake in heated waffle iron, following baking directions which come with the waffle iron.

YEAST BREADS

(See discussion of bread on pages 128–132 for further suggestions.)

YEAST BREAD

Temperature: 425° F., 15 minutes
375° F., 45 minutes

Time: about 60 minutes

- 1 cake yeast
- ¼ cup lukewarm water
- 1 cup milk
- 1 tablespoon shortening
- 1 tablespoon sugar
- 2 teaspoons salt
- 1 cup boiling water
- 6 cups all-purpose flour

1. Crumble the yeast. Add lukewarm water. Set aside. 2. Bring the milk to the boiling point. Add the shortening, sugar, and salt. Add the boiling water. Cool to lukewarm temperature. 3. Add the bubbling yeast.

To make a sponge, add one-half the flour at this time. Stir until smooth. Set in covered container in warm place. When doubled in bulk add the remaining flour. Knead until smooth. Set in covered place to rise until doubled in bulk. Knead and shape into loaves. Put in greased bread pans and cover. Set to rise in warm place until light.

If a sponge is not desired, all the flour is added at the start. The procedure is as follows: Set dough to rise until doubled in bulk, knead, rise again. Knead. Shape into loaves. Rise until light.

Set pans into preheated oven for fifteen minutes. Reduce heat and bake the remainder of the time. Remove bread from pans, set on cooling rack.

To make breads of flour other than white, the above recipe may be used, substituting entire wheat, cracked wheat, rye for one-half the white flour. Additional sweetening may be added.

The amount of flour given is only approximate, since different flours have varying absorptive qualities.

DUTCH APPLE CAKE or KUCHEN

Temperature: 375° F. Time: about 30 minutes

- 1 cake yeast
- ¼ cup lukewarm water
- ¾ cup milk
- 4 tablespoons sugar
- ½ teaspoon salt
- 4 tablespoons butter
- 2 eggs
- 2¾ cups all-purpose flour
- sour apples
- ¼ cup sugar
- ½ teaspoon cinnamon

1. Crumble yeast in lukewarm water. Set in warm place. 2. Scald the milk, add the sugar, salt, and butter. 3. When cooled to a lukewarm temperature, add the bubbling yeast and unbeaten eggs. Add flour to make a soft dough. 4. Cover, let rise until doubled in bulk. 5. Knead, let rise again. 6. Knead. Spread in buttered dripping pan. Have dough about one-third inch thick. Brush with melted butter. 7. Arrange thin slices of apple in dough in parallel rows. Sprinkle with sugar mixed with cinnamon. 8. Cover, let rise. 9. Bake in a preheated oven for the required time. After the first ten minutes the kuchen may be covered, removing the cover for the last ten minutes of baking.

GERMAN COFFEE CAKE

Temperature: 375° F. Time: about 30 minutes

Use the recipe for Dutch Apple Cake, omitting one egg and apples. Spread the dough about one-half inch instead of one-third inch thick. Brush with melted butter generously. Cover with mixture of rolled cracker crumbs, sugar, and cinnamon. Add a few teaspoons of heavy cream when partially baked.

or

Cover with two tablespoons of butter, rubbed into two tablespoons of flour, one-quarter cup of sugar, and three-quarters of a teaspoon of cinnamon.

or

Cover with three tablespoons of sugar dissolved in one tablespoon of water. Sprinkle thickly with chopped almonds.

PARKER HOUSE ROLLS

Temperature: 425° F. Time: about 12–15 minutes

1 cake yeast	2 tablespoons sugar
¼ cup lukewarm water	4 tablespoons butter
1 teaspoon sugar	2 teaspoons salt
2 cups milk	5½ cups all-purpose flour (approx.)

1. Crumble the yeast in the water and add the small amount of sugar. 2. Scald milk. Add sugar, butter, and salt. Cool to lukewarm temperature. 3. Add bubbling yeast. 4. Stir in about one-half of the flour. Beat thoroughly, cover. 5. When doubled in bulk, put dough on a floured board, knead, and roll to one-third inch thickness. 6. Use a round biscuit cutter to cut the rolls. 7. Brush the top of the round with melted butter and make a crease down the center. Fold one-half over onto the other and press the edges together. 8. Let rise until light. 9. Bake in a preheated oven for the required time. 10. Brush tops with melted butter or top milk.

HOT CROSS BUNS

Temperature: 375° F. Time: about 20 minutes

1 egg	¼ cup lukewarm water
3 tablespoons sugar	3 cups all-purpose flour
3 tablespoons butter	¾ teaspoon cinnamon
1 cup scalded milk	½ teaspoon salt
1 cake yeast	¼ cup currants

1. Follow the directions for Parker House rolls, putting the beaten egg, sugar, and butter into cooled milk. 2. Add the bubbling yeast, the flour, cinnamon, and salt, and beat until smooth. Add the currants. 3. Let rise until light, knead, cover, and let rise again. 4. Knead and shape into large biscuit or bun

shapes. Brush with beaten egg. Cut two gashes on the top at right angles to each other. 5. Bake in a preheated oven for the required time. After baking, put on sugar icing in the shape of a cross.

REFRIGERATOR ROLLS

Temperature: 450° F. Time: about 20 minutes

1 cake yeast	1 cup mashed potatoes
½ cup lukewarm water	2 eggs
1 cup milk	6 cups all-purpose flour (approx.)
⅔ cup shortening	2 teaspoons salt
½ cup sugar	

1. Crumble the yeast. Add to the lukewarm water. Put in a warm place. 2. Scald the milk. Add the shortening, the sugar, the salt, and the mashed potatoes. When lukewarm, add the yeast. Mix thoroughly. 3. Add the well-beaten eggs. 4. Stir in enough flour to make a stiff dough. 5. Knead well on a lightly floured board. 6. Put into a container large enough to allow for a small amount of rising. Rub over with melted butter. Cover tightly and place in the refrigerator. 7. About two hours before baking time take out the amount of dough desired, shape into rolls. Cover and let rise until light. 8. Bake in a preheated oven for the required time.

The unused dough which remains in the refrigerator will keep for three or four days.

Score Card for Yeast Bread

Appearance:		
	Top	5
	Volume	10
Crust:		
	Color	10
	Depth	5
	Texture	5
	Unbroken	5
Crumb:		
	Color	10
	Moisture content	5
	Texture	15
Flavor:		30
	Total	100

What are the characteristics of good bread?

Color: A slice of white bread should have a satiny luster, show no streaks, have no grayish cast. Milk bread should have a creamier cast than ordinary white bread.

Grain: In white bread the grain should be even, no large holes, no streaks or extreme closeness of grain. Cell walls should be thin and elongated upward.

Texture: White bread texture should be elastic, soft, springy.

Flavor: Flavor of white bread should be that of well-blended ingredients and well-baked loaf; no suggestion of sourness, yeast, mustiness; salt enough to prevent flat taste. Graham and whole-wheat bread should have a pronounced whole-grain flavor.

Loaf: Should be oblong, symmetrical; top evenly rounded.[1]

The dough should be so shaped into a loaf that the surface is unbroken and not marked by one fold of dough overlapping another. Also, there should be no cracks along side of the loaf due to expansion of dough after crust has formed.

SOUP

(See discussion of soups on pages 80–83, 114–115 for further suggestions.)

Cream Soups

SOUP	PURÉE	VEGETABLE JUICE	MILK	FLOUR	BUTTER	SALT	ADDITIONAL INGRED.
Asparagus	1 c	½ c	1½ c	2 T	1 T	½ t	
Carrot	1 c		2 c	1 T	1 T	½ t	
Cauliflower	1 c		2 c	2 T	1 T	½ t	
Celery	1 c	1 c	1 c	2 T	2 T	½ t	
Corn	1 c		2 c	1 T	2 T	½ t	
Lettuce	1 c	1 c	1 c	2 T	2 T	½ t	onion
Mushroom	1 c	1 c	1 c	2 T	1 T	½ t	
Onion	1 c		2 c	2 T	1 T	½ t	
Pea	1 c		2 c	2 T	1 T	½ t	⅛ t mint
Potato	1 c		2 c	1 T	2 T	½ t	onion
Spinach	1 c	½ c	1½ c	2 T	2 T	½ t	onion
Tomato	1 c		2 c	1 T	2 T	½ t	

[1] Reprinted through the courtesy of the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C., taken from *Consumers' Guide*, Vol. IV, No. 3.

VARIETY IN SOUPS

A great variety of canned soups of excellent quality are available. For new and exciting flavors try combining two or three to make a new soup.

Chicken broth is good with cream of pea soup.

Clear tomato soup adds zest to consommé.

Scotch broth and vegetable soup make a substantial combination.

Old-fashioned bean soup may be combined with tomato soup.

And so on and on.

Use your imagination and evolve at least one soup with a new flavor.

CRACOW BORTSCH

1 No. 3 can beets (4 cups)	pepper
water	sugar to taste
lemon juice	2 eggs
salt	½ cup sour cream

1. Chop beets very fine. 2. Reheat in liquid in which they were canned. Add an equal quantity of water. Season to taste with lemon juice, salt, pepper, and just enough sugar to make mixture mellow, not sweet. 3. Pour while hot onto two beaten eggs. Reheat carefully. 4. Add sour cream. 5. Serve hot.

ONION SOUP

9 small onions	salt and pepper to taste
1 tablespoon sugar	bread slices
2 tablespoons butter	grated cheese
1 quart soup stock	

1. Peel and slice the onions. 2. Caramelize the sugar. Add the butter and onions. Cook until light brown. Keep the slices of onion whole. 3. Add the stock and the seasoning. 4. Place toasted slices of bread in the bottom of a soup plate. 5. Pour the hot soup over them and dust with grated cheese.

POTATO AND RYE BREAD SOUP

4 potatoes	1 cup sour cream
4 slices rye bread	salt and pepper to taste
4 cups water	

1. Pare potatoes and cut into cubes. 2. Add bread cut into small pieces. Leave the crusts on the bread. Caraway-seed rye bread may be used. 3. Cook in the water until mixture is soft. 4. Put through a sieve. 5. Add cream and seasonings, reheat, and serve very hot.

VARIETY IN VEGETABLES

(See discussion of vegetables on pages 85–88 for further suggestions.)

The question of vegetable cookery was covered thoroughly in the fore part of the book. In this section we shall suggest desirable ways of serving the various vegetables.

Plain boiled with all liquid absorbed during cooking and requiring nothing but the addition of butter: globe artichokes, beans (all fresh varieties), beets, broccoli, Brussels sprouts, carrots, corn, cabbage, cauliflower, onions, peas, spinach, turnips, salsify, radishes, rutabaga.

Plain boiled, but served with enriched butter sauce such as Hollandaise: asparagus, artichokes, lima beans, cauliflower, broccoli.

Steamed or baked and served with butter: celery, onions, potatoes, summer squash, sweet potatoes, tomatoes, hubbard squash.

Broiled and served with butter: mushrooms, tomatoes.

Sautéed, or dipped in batter and sautéed, and served with salt and pepper: eggplant, onions, cauliflower, tomatoes, carrots, okra, peas, turnips.

Fried in deep fat: potatoes, onions, sweet potatoes, carrots.

Cooked and served in cream sauce: asparagus, beans, carrots, cabbage, cauliflower, celery, kohlrabi, peas, turnips.

Cooked and then glazed: onions, carrots.

Escalloped: all vegetables except corn and sweet potatoes.

Vegetables eaten raw: lettuce, chives, endive, chicory, cabbage, carrots, tomatoes, celery, radishes, cucumbers, parsley, onions, green peppers, escarole, cauliflower, spinach.

Vegetables stuffed with forcemeat or other vegetables: cucumbers, eggplant, green peppers, onions, mushrooms, tomatoes.

WILTED LETTUCE

½ pound leaf lettuce
¼ cup diced bacon
¼ cup vinegar
2 teaspoons sugar
1 teaspoon salt
⅛ teaspoon pepper

1. Wash and drain the lettuce. Cut into ribbons with the kitchen scissors. Set lettuce aside. 2. Cook the bacon until crisp. 3. Add the remaining ingredients. Bring to the boiling point. 4. Pour, while boiling hot, over the lettuce. 5. Cover and let steam until the lettuce is wilted.

LIMA BEAN LOAF

Temperature: 375° F. Time: about 30 minutes

3 cups lima bean pulp (mashed beans)
1 egg and 1 yolk
1½ cups bread *or* cracker crumbs
1 teaspoon salt
¼ teaspoon pepper
½ teaspoon sage *or* poultry-dressing seasoning
tomato *or* brown sauce

1. Combine the bean pulp with the eggs, crumbs, and seasoning. 2. Press into a well-oiled bread pan and bake in a preheated oven for the required time. 3. Unmold and serve hot with the desired sauce.

SPRING LUNCHEON DISH

Temperature: 350° F. Time: about 20 minutes

spinach
medium white sauce
cheese
eggs
butter
salt, pepper

1. Line a casserole or glass baking dish — which may later be sent to the table — with a two-inch layer of cooked spinach. 2. Cover with a medium white sauce, enriched with melted cheese. For each cup of white sauce use one-quarter cup of cheese. 3. Break as many eggs into the surface of this sauce as there are guests to be served. Dot with butter, season with salt and pepper. 4. Set in a preheated oven and bake the required time or until the spinach is bubbling and the eggs are cooked but still soft.

SPINACH SUPREME

Temperature: 350° F. Time: about 1 hour

4 tablespoons butter
5 tablespoons flour
1 cup milk
3 cups cooked spinach
2 tablespoons butter, melted
3 eggs
salt
pepper

1. Make a white sauce using the butter, flour, and milk. 2. Add to the chopped, cooked spinach. 3. Add the melted butter and the eggs well beaten. Season to taste. 4. Pour into a mold, set in a pan of hot water, and bake in a preheated oven for the required time. 5. Serve from the dish in which it was baked.

BAKED POTATOES ON THE HALF SHELL

baking potatoes
milk
butter
salt
pepper

1. Select baking potatoes of the same size. Scrub. 2. Set in a preheated oven. Protecting the palm of your hand with a pot holder, squeeze the potato. If soft, it is done. 3. Cut the baked potatoes in halves lengthwise. Scoop the soft potato from the shells. Put through a ricer. Heat milk. Add butter. 4. Combine with riced potatoes. Season, and beat until fluffy. Refill the potato shells piling the mixture lightly into them. 5. Set under the broiler flame to brown the top. Finely chopped parsley or chives, grated cheese, or stiffly beaten egg white may be folded into the whipped potatoes before they are put back into the shell.

MEATS

(See discussion of meats on pages 115–125 for further suggestions.)

Definitions of Terms Used in Meat Cookery[1]

These definitions of common terms used in meat cookery were adopted by the coöperators in the national project, "Coöperative

[1] These definitions are reprinted through courtesy of National Live Stock and Meat Board. Taken from "Ten Lessons on Meat," copyright 1933 by National Live Stock and Meat Board.

Meat Investigators." Their adoption and use by home economics teachers and students generally will do much to clarify and simplify the subject of meat cookery in the home and the experimental laboratory.

Bake, v. t. To cook by dry (indirect) heat, usually in an oven, or in hot ashes, upon heated metal or stones, etc.; to roast, especially when said of meat, as to roast beef; also to cook first by parboiling and then to finish by baking, particularly ham.

Barbecue, v. t. To roast slowly (an animal) whole or in pieces on a gridiron, spit, or over coals in a specially prepared trench. The meat is usually basted with a highly seasoned sauce.

Baste, v. t. To moisten meat while cooking to prevent drying and to add flavor. The liquid used is usually pan drippings, water, or water and fat.

Boil, v. t. To subject to the action of the heat of boiling liquid, especially water. See SIMMER. NOTE: Meat should be simmered, not boiled.

Bouillon, n. (F.) Liquid made by simmering beef or other meat, seasoned, freed from fat and flocculent material (clarified); a clear soup or broth.

Braise, v. t. To brown (meat) in a hot receptacle in a small amount of fat, then to cook slowly in juices from the meat or in added liquid in a covered utensil. The added liquid may be water, milk, cream, meat stock, dilute vinegar, or juices from vegetables.

Broil, v. t. To cook by radiant (direct) heat from hot coals, a gas flame, or electric element; to grill.

Broth, n. Liquid in which meat, fish, vegetables, or cereals, etc., have been cooked; it contains dissolved and flocculent material; it may or may not contain fat; a thin soup. Cf. Stock.

Consommé, n. (F.) A clear, strong broth of meat and vegetables; usually made from two or more kinds of meat, as beef, veal, and chicken; seasoned, freed from fat and flocculent material (clarified).

Fricassee, n. A dish made of fowl, veal, or other meat, cut in pieces and stewed in gravy. Braising is the method used in making a fricassee. Cf. BRAISE.

Fry, v. t. To cook in fat; especially (1) to cook in a small amount of fat; also called sauté; (2) to cook in a deep layer of fat; also called deep-fat frying.

Lard, v. t. To place strips of fat, called lardoons, on top of or to insert into meat to add flavor and to prevent dryness.

Larding. To lard means to place strips of fat, called lardoons, on top of or to insert into meat to add flavor and to prevent dryness. Larding is a process in meat cookery which always has been used to a much greater extent by Old World cooks than it has in this country. In cooking some of the less-tender cuts which are deficient in fat, it is very desirable to lard the meat before cooking as the juiciness and flavor will both be increased.

Fat salt pork or bacon is cut into strips about one-fourth inch thick, one-fourth inch wide, and two and one-half inches long. This strip of fat meat is called a lardoon. A regular larding needle can be procured. This needle is used to draw the strips of fat through the upper surface of the meat. The lardoons should be about an inch apart. The larding should always be with the grain of the meat. As the meat cooks the lardoons melt through the meat, giving it extra juiciness and flavor.

Lardoon, n., **Lardon,** n. A long, slender, pencil-like portion of fat, such as pork fat, bacon, or suet, used in larding.

Marinade, n. An acid liquor usually with seasoning and with or without oil, in which meat is allowed to stand before cooking to improve flavor and to increase tenderness.

Marinate, v. t. To treat with a marinade.

Panbroil, v. t. To cook in a hot, uncovered frying-pan, pouring off fat as it accumulates in the pan.

Parboil, v. t. To simmer for a short time preliminary to cooking by another method.

Pot-Roast, n. A piece of meat cooked by braising.

Roast, v. t. To cook by dry heat before a fire or over hot stones or metals; now, especially when said of meats, to cook in an oven. Cf. BAKE.

Sauté, pp. of French verb *sauter*, meaning to brown quickly in a small amount of fat, with frequent turning. Used in America as a verb meaning to fry in a small amount of fat. Cf. FRY.

Sear, v. t. To brown the surface of meat by the short application of intense heat. Meat is seared for the purpose of developing flavor and improving appearance.

Simmer, v. t. To cook in any quantity of water below the boiling point; the cooking temperature is approximately 185° F.

Steam, v. t. To cook in steam with or without pressure.

Stew, v. t. To cook with a simmering heat. Cf. SIMMER.

Stew, n. A dish made of small pieces of meat simmered in liquid, with or without vegetables.

Stock, n. Liquid in which meat and sometimes vegetables have been cooked; used in making soups, gravies, sauces, etc. It contains extractives, soluble proteins, especially gelatin, flavoring materials; it may or may not contain fat.

ROASTING POULTRY [1]

Roasting in the modern manner means to cook by dry heat uncovered in a moderate (350° F.) to slow oven (300 to 250° F.). The larger the bird the lower the temperature to be used. *No water is added to the pan.*

Work on the interior temperatures for cooking poultry indicates that placing the bulb of the thermometer into the thickest portion of the thigh muscle and cooking until a temperature of 185° F. is reached gives good results. The best temperature to which breast muscle should be cooked has not yet been determined.

PREPARATIONS PRELIMINARY TO THE ACTUAL ROASTING

Unless the bird has been purchased full drawn or ready-to-cook, request the marketman to do several things: to remove the leg tendons, to cut off the feet rather than chop them off, to leave the wing tips on, to remove the crop from the back, and to take out the wishbone. By making an incision down the center-back of the neck skin and pulling the skin away from the neck, the neck may be cut off close to the body, and the crop and windpipe are easily removed from this opening. This leaves the skin over the breast unbroken. The wishbone may be easily removed and its removal facilitates carving the breast meat. To remove the wishbone pull the neck skin back toward and over the breast, cut away each tip, slip the knife along the bone on either side to the "fork," pull it loose, and lastly cut it off.

[1] Reprinted through the courtesy of the Institute of American Poultry Industries, Chicago, taken from *The Poultry You Buy and How to Cook It.*

Cleaning

All cleaning of the skin of poultry should be done before the bird is drawn if the bird is drawn at home. Otherwise care must be used so as not to allow water and other materials used in cleaning to contact the inside. Flavor can be impaired and also washed away. The inside of the bird need only be wiped with a damp cloth to dry the inside before stuffing. If wing tip feathers have been left on (usually on turkey) immerse the tip in boiling water for a few minutes. This aids in pulling out the feathers (preferably with pliers). Pinfeathers are removed easily with a strawberry huller or a pair of tweezers. Wash outside skin thoroughly. A soft brush facilitates the job. Dry cornmeal or salt makes a good skin abrasive. Soap or soda may be used, but care should be taken to rinse the bird thoroughly if either is used. The oil sac at the back must be cut away. Kidney and lung tissue embedded inside on either side of the backbone may or may not be removed. It is relished by some people.

While not necessary, it is sometimes good planning to prepare the bird for the oven one or two days in advance of use. In addition to the usual advantages, the exchange of flavors between the meat and the dressing improves both for many tastes. In this case, store bird breast side down.

From one-eighth to one-quarter teaspoon salt per pound of bird is a good allowance, this salt to be rubbed into flesh from the inside before stuffing. Salting the outside is almost a useless operation. It tends to blister the skin and penetration through the skin is slight.

Trussing the Bird

This procedure makes a compact shape of the bird and prevents drying out of all parts. It adds greatly to the attractiveness of the bird on the platter. This method leaves the upper surface free of any string or string marks.

Fold the wings to form a triangle, with the wing tips caught under the back of the bird. In this position they help to hold the neck skin in place. A skewer may be inserted through the wings and across the back to facilitate tying later.

Tie a cord firmly around the lower end of each drumstick. This

prevents the muscle and skin from drawing away from the leg bone during roasting. Cross the drumsticks and tie the ends together using the middle portion of a long cord. Do not cut this cord any time during the trussing. Press legs against the body and down, tying leg ends to the tail piece. Pull the string firmly as the bird is shaped to compactness. Skewers inserted underneath the leg as the legs are pressed down, one from each side unless one long one is available, are a good help. The leg skewers do not need to be pushed through the flesh if the legs are pressed downward firmly in tying them to the tail piece.

Time Table for Braising[1]

CUT	AVERAGE WEIGHT OR THICKNESS	APPROXIMATE COOKING TIME
BEEF		
Pot-roast	3–5 pounds	3–4 hours
Swiss steak	1½–2½ inches	2–3 hours
Fricassee	2 inch cubes	1½ hours
Beef birds	½ inch (x 2 in. x 4 in.)	1½ hours
Short ribs	Pieces (2 in. x 2 in. x 4 in.)	1½ hours
Round steak	¾ inch	45–60 minutes
Stuffed steak	½–¾ inch	1½ hours
PORK		
Chops	¾–1½ inches	45–60 minutes
Spareribs	2–3 pounds	1½ hours
Tenderloin		
Whole	¾–1 pound	45–60 minutes
Fillets	½ inch	30 minutes
Shoulder steak . . .	¾ inch	30–45 minutes
LAMB		
Breast — stuffed . . .	2–3 pounds	1½–2 hours
Breast — rolled . . .	1½–2 pounds	1½–2 hours
Neck slices	¾ inch	1 hour
Shanks	½ pound each	1–1½ hours
VEAL		
Breast — stuffed . .	3–4 pounds	1½–2 hours
Breast — rolled . . .	2–3 pounds	1½–2 hours
Birds	½ inch (x 2 in. x 4 in.)	45–60 minutes
Chops	½–¾ inch	45–60 minutes
Chops — breaded . .	½–¾ inch	45–60 minutes
Steaks or cutlets . . .	½–¾ inch	45–60 minutes
Shoulder chops . . .	½–¾ inch	45–60 minutes

[1] Reprinted through the courtesy of the National Livestock and Meat Board, Chicago, taken from "Ten Lessons on Meat," copyright, 1940.

Time Table for Roasting[1]

Roast	Weight	Oven Temperature Constant	Interior Temperature When Removed from Oven	Approximate Time per Pound
	Pounds	*Degrees F.*	*Degrees F.*	*Minutes*
BEEF				
Standing ribs	6–8	300	140	18–20
			160	22–25
			170	27–30
Standing ribs (1 rib)	1.8	350	140	33
			160	45
			170	50
Rolled ribs	6–8	300	140	32
			160	38
			170	48
Chuck ribs	5–8	300	150–170	25–30
Rump	5–7	300	150–170	25–30
PORK — FRESH				
Loin — Center	3–4	350	185	35–40
Whole	12–15		185	15–20
Ends	3–4		185	45–50
Shoulder — Whole	12–14	350	185	30–35
Boned and rolled	4–6	350	185	40–45
Cushion	4–6	350	185	35–40
Pork butt	4–6	350	185	45–50
Fresh ham	10–12	350	185	30–35
PORK — SMOKED				
Ham — Whole	10–12	300	170	25
Tendered	10–12	300	160	15
Half	6	300	170	30
Tendered	6	300	160	20
Shank end	3	300	170	40
Butt end	3	300	170	45
Cottage butt	2–4	300	170	35
Picnic	3–10	300	170	35
LAMB				
Leg	6½–7½	300	175–180	30–35
Shoulder — Rolled	3–4	300	175–180	40–45
Shoulder	4½–5½	300	175–180	30–35
Cushion	3–4	300	175–180	30–35
VEAL				
Leg roast	7–8	300	170	25
Loin	4½–5	300	170	30–35
Rack — 4–6 ribs	2½–3	300	170	30–35
Shoulder	7	300	170	25
Shoulder — Rolled	5	300	170	40–45

Oven temperatures for the constant temperature method were selected because they give results comparable to the searing method in browning, amount of shrinkage, and in roasting time per pound. This table serves as a guide, therefore, in roasting by either method.

[1] Reprinted through the courtesy of the National Livestock and Meat Board, Chicago, taken from "Ten Lessons on Meat," copyright, 1940.

Time Table for Broiling*[1]

CUT	WEIGHT	APPROXIMATE COOKING TIME	
		Rare	Medium
	Pounds	*Minutes*	*Minutes*
BEEF			
Chuck steak — 1 inch	2 1/3	24	30
1 1/2 inches	4	40	45
Rib steak — 1 inch	1 1/2	15	20
1 1/2 inches	2	25	30
2 inches	2 1/4	35	45
Club steak — 1 inch	1	15	20
1 1/2 inches	1 1/4	25	30
2 inches	1 1/2	35	45
Sirloin steak — 1 inch	3	20	25
1 1/2 inches	4 1/4	30	35
2 inches	5 3/4	40	45
Porterhouse steak — 1 inch	2	20	25
1 1/2 inches	2 1/2	30	35
2 inches	3	40	45
Ground beef patties 1 inch thick by 3 inches	4 ounces	15	25
LAMB			
Shoulder chops — 1 inch	3 ounces	Lamb chops are not served rare	12
1 1/2 inches	6 ounces		18
2 inches	10 ounces		22
Rib chops — 1 inch	2 ounces		12
1 1/2 inches	4 ounces		18
2 inches	5 ounces		22
Loin chops — 1 inch	3		12
1 1/2 inches	5		18
2 inches	6		22
Ground lamb patties 1 inch by 3 inches	4 ounces		18
PORK			
Ham slice			
1/2 inch	3/4–1	Ham always cooked well done	20 (well done)
1 inch	1 1/2–2		25–30
Ham slice — tendered			
1/2 inch	3/4–1		10–12
1 inch	1 1/2–2		16–20
Bacon			4–5

* This time table is based on broiling at a moderate temperature (350° F.). Rare steaks are broiled to an internal temperature of 130° F.; medium to 160° F. Lamb chops are broiled to 170° F. Ham is cooked well done. The time for broiling bacon is influenced by personal preference as to crispness.

[1] Reprinted through the courtesy of the National Livestock and Meat Board, Chicago, taken from "Ten Lessons on Meat," copyright, 1940.

DIRECTIONS FOR ROASTING CHICKEN[1]

Temperature: moderately low, 325 to 350° F.

Time: 30 min. per lb. for small (3½ lbs.), 22 to 25 min. per lb. for larger (4 to 6 lbs.)

1. Weigh the stuffed bird so that total cooking time may be approximated. Weight may be calculated from the purchased weight and the ingredients used in the dressing.

2. Lay the stuffed, trussed bird on a rack in an open pan. Brush skin thoroughly with melted or softened fat. Wrap a fat-moistened strip of cloth around the leg ends, bringing it well up on the drumsticks. Turn breast-side down and cover bird with a cloth dipped in fat.

3. Place in moderate oven. Cook uncovered, breast-side down, about one-half the total time.

4. Turn breast-side up. Place any strips of body fat removed in dressing over the breastbone and legs underneath the cloth now placed over the breast. Bacon or salt pork strips may be used in lieu of other fat, if desired.

5. Baste over the cloth with extra fat (or fat from bottom of pan) at half-hour intervals during the cooking. A cloth used this way holds the fat over the bird. The cloth may be removed toward the end of the cooking if the bird is not browned nicely.

Covering the pan in roasting a large young chicken (under one year) is unnecessary. But if a more tender skin is liked it should be covered toward the latter part of the cooking. Small birds (1½ to 3½ lbs.) are best if cooked covered during the first half of the cooking.

Approximate Time for Roasting Turkey at Oven Temperature of 300° F.[1]

Weight of Stuffed Bird in Pounds	Average Total Cooking Time in Hours	Approximate Minutes Cooking per Pound in Minutes
Small — 6 to 10	3 to 3½	20 to 25
Medium — 10 to 16	3½ to 4½	18 to 20
Large — 18 to 25	4½ to 6	15 to 18

[1] Reprinted through the courtesy of the Institute of American Poultry Industries, Chicago, taken from *The Poultry You Buy and How to Cook It.*

In roasting turkey follow the same procedure as that recommended for the roasting of chicken. (See page 533.)

The half of a whole turkey will average somewhat higher in minutes per pound than the whole of a corresponding size.

In addition to the number of minutes per pound the total cooking time may be quite accurately estimated by cooking the gizzard in advance of the roasting. Since the giblets are always precooked for any other use or service, there is no extra labor involved except to time the cooking. Simmer giblets in unsalted water to cover. The time required for cooking the gizzard (test with fork — not too sharp) plus one hour to heat the bird through is a good approximation of the total cooking time. If the bird has been prepared in advance and has been kept in the refrigerator for some time, it should be brought out to allow it to come to room temperature before roasting.

As the expiration of time estimated for doneness approaches, the following test should be made. Move the leg by grasping the end bone. If the joint moves easily, the ligaments in the joint are tender and the meat is done. The wing joint may be tested in the same way.

STANDARD DRESSING [1]

(For a 12- to 16-pound bird)

1½ pound loaf bread, stale	¼ teaspoon white pepper
½ to 1 pound butter	¼ cup minced onion, sautéed
1 teaspoon salt	

1. Remove crusts, cut bread into 1-inch cubes, and drop into a large mixing bowl. 2. Cut butter into dice, about three-fourths inch. 3. Toss all ingredients together using two forks or hands.

Variations for Standard Dressing

1. Add 2 cups finely chopped celery. It may be added raw or partially cooked.
2. Add 1 pound chestnuts.

[1] Reprinted through the courtesy of the Institute of American Poultry Industries, Chicago, taken from *Poultry Dressings*.

To prepare: Place chestnuts in cold water to cover. Bring to boil and boil gently for 5 minutes. Drain. Peel and skin. If the meats are not tender enough, drop in simmering, salted water and simmer until tender. Chop coarsely.

3. Add 1 can Chinese water chestnuts. Drain and chop coarsely.

4. Add 2 cups nutmeats (almonds, hazel or hickory nuts, pecans, pine nuts, or walnuts — black are especially nice). A superior flavor results if the nuts are toasted or browned lightly in 2 tablespoons of the butter.

5. Add ¼ to ½ pound mushrooms. Chop and cook slowly in 1 tablespoon of the butter about 5 minutes.

6. Add 1 cup or more coarsely chopped olives. May use green, ripe, or stuffed olives.

7. Add more onion. Two to 3 cups chopped onion cooked in 4 cups boiling, salted water. Drain thoroughly before adding to the other ingredients.

8. Add 1 pint or more of drained oysters. These may be chopped, left whole if small, and added raw, or preheated in 2 tablespoons of the butter.

9. Add ½ to 1 pound sausage. Sausage meat or tiny sausages may be used. Break meat into small chunks and brown lightly. The sausages may be browned or parboiled in water for about 10 minutes.

CROUTON DRESSING

(For about a 4-pound bird)

¼ to ½ cup butter
4 cups stale bread cubes
⅛ teaspoon white pepper, if desired
¼ cup minced onion
½ teaspoon salt

Heat fat in large skillet, add bread cut in half-inch cubes, stir constantly, and cook until bread is toasted to a delicate "toasty" brown. If desired, the cubes may be toasted in the oven or under the broiler and then sprinkled with melted fat. Add onion and salt and toss to combine thoroughly. Taste and add more seasoning, if desired. This dressing has an unusually delicious flavor due to the preparation of the bread. One-half cup water may be added with the seasonings if a less crumbly dressing is desired.

RECIPES FOR INTERESTING MEAT DISHES

CHILI CON CARNE

1 pound chopped round steak
1 No. 3 can tomatoes (4 cups)
1 No. 2 can red kidney beans (2½ cups)
1 bay leaf
2 onions, chopped
2 green peppers, chopped
4 cups boiling water
4 teaspoons chili powder
2 teaspoons salt

1. Put ingredients in saucepan. Simmer until thick. This requires approximately two and one-half hours. 2. Serve with crackers.

ARABIAN PORK CHOPS

Temperature: 325° F. Time: about 1 hour, 15 minutes

6 lean pork chops

1. Sear the chops. 2. Arrange in a casserole, or baking dish, placing on each chop:

1 tablespoon raw rice
1 slice onion
2 strips green pepper
1 tablespoon canned tomato

3. Cover with three cups hot water, add salt and pepper, bake in a preheated oven for the required time.

PORK CHOPS SUPREME

Temperature: 325° F. Time: about 1 hour, 30 minutes

Chops

pork chops
salt
pepper
¼ cup water
green pepper
shredded onion

Dressing

1 cup freshly crumbed day-old bread
½ teaspoon chopped parsley
¼ teaspoon poultry-dressing seasoning
¼ teaspoon salt
⅛ teaspoon pepper
3 tablespoons melted butter
3 tablespoons hot water

1. Count on as many pork chops as there are guests to be served. Sear chops on one side only. Season with salt and pepper. 2. Place chops, seared side up, in a casserole. 3. Top each chop

with a mound of dressing. 4. Add hot water. 5. Cover casserole. Set in a preheated oven and bake for the required time, removing the cover fifteen minutes before chops are done. 6. When serving place a wide ring of green pepper on top of the dressing. Fill with lightly browned shredded onion.

In making the dressing, combine the crumbs, parsley, seasonings, melted butter, and hot water. Mix well.

CHOP SUEY

- 1½ pounds lean pork
- 1 bunch celery
- 3 large onions
- 2 tablespoons bacon fat
- 2 bouillon cubes
- 1½ cups hot water
- 2 tablespoons soy sauce
- 1 tablespoon molasses
- 2 tablespoons cornstarch
- salt, pepper
- 1 can bean sprouts

1. Cut the meat into small pieces. Dice the celery and the onions. 2. Cook the pork slowly in the bacon fat for five minutes. 3. Add the celery, cover the pan, and cook for five minutes. 4. Add the onion, cover the pan, and cook for five minutes. 5. Dissolve the bouillon cubes in the hot water. Add the soy sauce, the molasses, and the cornstarch mixed with a little cold water. Put this mixture over the meat in the frying pan. 6. Simmer until the meat is tender. Season to taste. 7. Five minutes before serving, add bean sprouts.

Chop Suey may be served with rice or deep-fat fried noodles. For frying, use freshly made, soft, moist noodles, not the dried noodles.

ITALIAN DELIGHT

Temperature: 350° F. Time: about 1 hour

- 1 small onion
- 2 small green peppers
- ¼ pound ground round steak
- 6 tablespoons cooking oil
- ¼ pound macaroni
- ½ cup cooked corn
- 1 cup canned tomato soup
- ¼ cup grated cheese
- salt

1. Sauté the onion, the green peppers, and the meat in the cooking oil. Brown lightly. 2. Cook macaroni in boiling salted

water. Drain. 3. Combine all the ingredients. 4. Set casserole in a preheated oven and bake the required time.

LAMB CHOP GRILL

mutton or lamb chops, cut thick
salt, pepper
bacon strips
sausages
potatoes on the half shell
mint jelly
grapefruit slices

1. Ask the meat dealer to cut mutton or lamb chops at least one inch thick. In an English mutton chop the kidney is left in. 2. Broil or panbroil the chops for about twenty minutes or longer, depending upon the thickness of the chops. Season. 3. Place on a hot plate. 4. Cook strips of bacon until crisp. Cook sausages until they are brown and crisp on the outside. Wash grapefruit, slice without peeling, cut each slice into halves, placing a spoonful of mint jelly on each half. 5. Assemble the grill for individual serving by placing the chop on the heated dinner plate. Lay crisp strips of bacon beside the chop. Place well-cooked sausage link on top of the chop. Place the potato on the half shell on the plate. Add the grapefruit and mint jelly. 6. Serve at once.

MEAT CROQUETTES

Temperature: 390° F. Deep fat frying time: about 4 minutes

2 tablespoons butter *or* substitute
4 tablespoons flour
¼ teaspoon salt
1 cup milk
2 cups cooked meat, finely ground
1 teaspoon lemon juice
1 teaspoon minced onion
2 tablespoons chopped parsley
bread crumbs
fat
water
egg

1. Melt butter or butter substitute in a heavy frying pan. Add the flour and salt. Cook until bubbling. Add half of the milk. Stir and cook until smooth. Add remainder of milk. This sauce will be very thick. Cool. 2. Add meat and seasonings. 3. When thoroughly cold, shape into cylinders or balls or pyramids.

4. Roll in finely ground bread or cracker crumbs. 5. Dilute one egg with one tablespoon water. Beat slightly. 6. Roll croquettes in beaten egg. Drain and roll in crumbs. 7. Put enough fat into a frying kettle so that when the fat is melted there are about three inches between the top of the fat and the top of the deep-fat frying kettle. Insert a deep-fat thermometer. When it registers somewhere between 375° F. and 385° F. the fat is of the right temperature. 8. Place no more than four croquettes in the frying basket. Lower the basket into the hot fat. Cook the croquettes the required time or until they are well browned. 9. Lift the basket, letting the fat drain back into the kettle. Place the croquettes on crumpled absorbent paper. Remove quickly to heated serving dish.

MIXED GRILL

cottage cheese	hard-cooked egg
tomatoes	mustard pickle
lettuce	toast fingers
mayonnaise	bacon
potato chips	ripe olives

1. In the center of each plate put a small mound of well-seasoned, creamy cottage cheese. 2. Surround the cheese with the following foods: one-half of a peeled tomato in a lettuce cup; small cup of lettuce holding mayonnaise; mound of potato chips; one-half hard-cooked egg with the yolk deviled; mustard pickle or India relish in the half of a hollowed lemon. Toward the rim of the plate place three toast fingers, slices of crisp bacon, ripe olives.

STUFFED GREEN PEPPERS

Temperature: 350° F. Time: about ½ hour

6 green peppers	1 tablespoon chopped parsley
1 medium-sized onion	½ cup chopped cooked ham
2 tablespoons fat	1 egg
½ cup bread crumbs *or*	stock *or* water
½ cup cooked rice	salt, pepper

1. Wash the peppers. Cut off the stem end. Remove the seeds and the membrane. 2. Parboil peppers in salted water for

five minutes. Drain well. 3. Chop onion. Brown in the melted fat. 4. Add the bread crumbs or rice, parsley, and the ham. 5. Beat the egg slightly. Add to the mixture. If this stuffing seems too dry, moisten with a little water. 6. Season to taste. 7. Fill the pepper shells with the mixture. 8. Set in a preheated oven and bake the required time.

VEAL BIRDS

Temperature: 350° F. Time: about 1 hour

- 1½ pounds veal steak
- ½ cup cracker crumbs
- ½ teaspoon onion juice
- 1 tablespoon green pepper, chopped
- 2 slices bacon, chopped
- ¼ teaspoon poultry-dressing seasoning
- 2 tablespoons melted butter
- salt, pepper
- celery salt
- flour
- fat
- 1 cup water *or*
- ½ cup water and ½ cup sour cream

1. Have the veal steak cut one-half inch thick. With a mallet, pound the steak until quite thin. Cut into four-inch squares. 2. Make a dressing by combining cracker crumbs, onion juice, chopped green pepper, chopped cooked bacon, poultry-dressing seasoning, melted butter, salt, pepper, celery salt. 3. Put a spoonful of the dressing on each square of meat. 4. Roll, holding securely with toothpicks or string. 5. Dredge with flour and brown in hot fat. 6. When well-browned transfer rolls or birds to baking dish. Add liquid. Cover closely. 7. Set in preheated oven and bake the required time.

The toothpicks or string must be removed from the birds before serving.

FISH AND SEA FOOD

(See discussion of fish on pages 126–128 for further suggestions.)

ANGELS ON HORSEBACK

(Pigs in Blankets *or* Oysters in Bacon)

- 6 large oysters
- ¼ teaspoon salt
- dash of pepper
- 3 slices bacon
- 6 half-slices hot toast

1. Sprinkle the oysters with salt and pepper. 2. Wrap each in a half slice of bacon, fastening with a toothpick. 3. Broil, or pan fry, until the bacon is crisp. 4. Serve with toast.

CODFISH BALLS

Temperature: 375° F.–385° F. Deep-fat frying time: about 2 minutes

1 cup shredded salt codfish
2 cups potatoes, cut into pieces
3 cups boiling water
1 egg
3 tablespoons melted butter
pepper

1. Cook fish and potatoes together in boiling water until soft. Drain. Mash thoroughly. 2. Add beaten egg, melted butter, pepper. 3. Drop by spoonfuls into deep fat heated to the required temperature. Fry until golden brown. Drain on absorbent paper.

HALIBUT CREOLE

Temperature: 350° F. Time: about 50 minutes

1 fillet halibut
2 cups canned tomatoes
small piece onion
3 cloves
1 teaspoon sugar
1 tablespoon butter
1 tablespoon flour
salt, pepper
½ lemon, sliced

1. Wipe the fish with a damp cloth and put in a baking dish, preferably a glass one which may later be sent to the table. 2. Mix the tomatoes, onion, cloves, and sugar and cook for ten minutes. 3. Make a roux of the butter and flour. Add the hot tomato mixture. Season to taste. Cook for five minutes and strain. 4. Pour one-third of the sauce onto the fish. 5. Bake in a preheated oven for the required time. Baste with the remainder of the sauce. Put thick slices of lemon on top of the fish during the last ten minutes of baking.

SALMON LOAF

Temperature: 350° F. Time: about 40 minutes

- 2 eggs
- 2 cups canned salmon
- ¼ cup canned milk
- ½ teaspoon salt
- ¼ teaspoon pepper
- 1 tablespoon minced parsley
- 1 tablespoon lemon juice
- 2 cups freshly crumbed day-old bread
- ¼ cup chopped pickle

1. Beat the eggs. 2. Remove pieces of skin and bone from the salmon. Combine with remaining ingredients. 3. Butter a loaf pan. Fill the pan with the salmon mixture. Smooth the top. 4. Bake in a preheated oven for the required time.

Serve with a white sauce to which some cooked peas have been added. NOTE: *Use unsweetened or evaporated milk.*

OYSTER STEW

- 1 pint oysters
- ½ cup cold water
- 2 cups milk
- 2 tablespoons butter
- ¼ teaspoon salt
- few grains pepper
- few grains mace

1. Pick over the oysters, removing any bits of shell. 2. Put in a saucepan with the cold water. Cook over a low fire until the oysters are plump and the edges begin to curl. 3. Heat the milk in the upper part of a double boiler. Add the butter and the hot oysters. Season with salt, pepper, and a suspicion of nutmeg or mace.

CHEESE DISHES

(See discussion of cheese on pages 92–95 for further suggestions.)

BLUSHING BUNNY

- ¾ pound cheese
- 1 tablespoon butter
- ¾ cup canned tomato soup
- ⅓ teaspoon dry mustard
- ⅛ teaspoon pepper
- salt, if necessary
- buttered toast

1. Cut the cheese into small pieces. Melt in the upper part of a double boiler. 2. Add the butter, tomato soup, and the seasonings. Cook until smooth. 3. Serve on buttered toast.

ENGLISH MONKEY

2 cups milk
2 cups bread crumbs
2 tablespoons butter
1 cup soft mild cheese, cut in pieces
2 eggs
1 teaspoon salt
few grains pepper

1. Heat the milk. 2. Add the bread crumbs. Let the mixture stand for five minutes. 3. Add the melted butter. 4. Melt the cheese in the upper part of a double boiler. Combine it with the other ingredients when the cheese is completely melted. Cook directly over the fire for three minutes. 5. Pour over toasted, buttered crackers.

WELSH RAREBIT

2 tablespoons butter
2 teaspoons flour
1 cup thin cream
1 pound soft mild cheese, cut in pieces
½ teaspoon salt
½ teaspoon mustard
few grains pepper
toast or wafers

1. Melt the butter. 2. Add the flour. Cook until bubbling. 3. Add the cream. Stir until smooth. 4. Add the cheese. Stir until the cheese is melted. Season to taste. 5. Serve on lightly toasted bread or wafers.

CHILALY

1 tablespoon butter
2 tablespoons chopped green pepper
1½ teaspoons chopped onion
½ cup cooked tomato pulp
¾ pound soft mild cheese
¾ teaspoon salt
few grains pepper
2 tablespoons milk
1 egg

1. Cook the butter slowly with the pepper and onion for three minutes, stirring constantly. 2. Drain the tomatoes. There should be one-half cup of pulp. Add the pulp to the first mixture. Cook for five minutes. 3. Add the cheese cut in small pieces, salt, and pepper. Cook over hot water until the cheese melts. 4. Add the milk and egg. 5. Serve at once.

MACARONI AND CHEESE

1 cup macaroni, uncooked
2 teaspoons salt
3 quarts water
3 tablespoons butter
2 tablespoons flour
1½ cups milk
⅔ cup soft *or* grated cheese
salt, paprika

1. Break macaroni into short lengths. This may be done easily by putting the unbroken sticks in a clean dish towel, gathering the ends of the towel tightly and holding them in the two hands, and then bending the towel at short intervals over the edge of a table.
2. Put salt in rapidly boiling water. Add the broken macaroni. Boil rapidly for approximately one-half hour. Drain in colander, rinsing with cold water. 3. Make a cream sauce using the butter, flour, and milk. 4. Add the cheese. Add the cooked macaroni. Season to taste. 5. Put in a baking dish. Set in a 350° F. oven. Cook until mixture bubbles. Garnish with parsley.

SPAGHETTI LOAF

Temperature: 350° F. Time: about 45 minutes

¼ pound spaghetti, cooked
1 cup soft bread crumbs
3 tablespoons melted butter
1 cup hot milk
1 cup grated cheese
1 tablespoon minced onion
2 tablespoons minced green pepper
1 tablespoon minced pimiento
3 eggs, separated

1. In cooking the spaghetti follow the directions given in the macaroni and cheese recipe for the cooking of macaroni. 2. Combine the ingredients. 3. Add the egg whites, stiffly beaten, at the last. 4. Put in an oiled baking dish. Set this in a pan of hot water. Set in a preheated oven and bake for the required time. 5. Serve with sliced tomatoes or Neapolitan sauce.

NEAPOLITAN SAUCE

1 tablespoon butter
1 onion, sliced
2 cups tomatoes
½ box Italian tomato paste
½ teaspoon salt
⅛ teaspoon pepper
¼ teaspoon allspice
¼ teaspoon mace
bit of bay leaf

1. Mix in the order given. Bring gradually to the boiling point and let simmer for fifty minutes. 2. Strain and pour over macaroni or spaghetti.

CHEESE SOUFFLÉ

Temperature: 350° F. Time: about 50 minutes

1 cup milk
3 tablespoons granulated tapioca
1 cup grated cheese
3 eggs
1 teaspoon salt
1 tablespoon Worcestershire sauce
few grains pepper

1. Heat the milk in the upper part of a double boiler. 2. Add the tapioca and cook for 20 minutes. Stir occasionally to keep the tapioca from sinking to the bottom. 3. Choose a sharp variety of cheese. Grate. Pasteurized cheese prepared for cooking may be substituted. This is soft enough to require no grating. It melts in the hot mixture and does not string. 4. After the cheese has been added to the hot mixture and is well melted and blended, add beaten yolks, the salt, sauce, and pepper. 5. Fold in the stiffly beaten egg whites. 6. Put into greased baking dish. Set this in a pan of hot water and bake in a preheated oven for the required time, or until the top is browned and the soufflé has separated slightly from the sides of the baking dish.

JELLIED CAMEMBERT CHEESE

Camembert cheese
green pepper
consommé
gelatin
cold water
toasted crackers

1. Scrape the surface of a ripe, creamy Camembert cheese. Make eight scorings on the top, pie fashion. 2. Insert a strip of green pepper in each scoring. 3. Open a tin of consommé. Add enough water to make one pint. 4. Soften one tablespoon gelatin in a small amount of cold water. 5. Heat the consommé to the boiling point. Add the gelatin. 6. Pour one-third of the mixture into a round flat-bottomed mold, slightly larger than the whole Camembert cheese. 7. When the gelatin is lightly set, put the

cheese in, scored side down. 8. Add the rest of the consommé. 9. Chill. Unmold at serving time. Cut along the green pepper lines and serve with toasted crackers.

SALAD DRESSINGS

FRENCH DRESSING

½ teaspoon sugar
1 teaspoon salt
¼ teaspoon paprika
4 tablespoons vinegar *or* lemon juice
¾ cup oil

1. Mix the sugar, salt, and paprika. 2. Add vinegar. Add oil. 3. Beat with a Dover egg beater or shake in a covered glass jar until the mixture thickens. The dressing will separate on standing, but can be shaken together again.

Two tablespoons of Roquefort type cheese (bleu) mashed to a paste may be added for Roquefort French dressing.

MAYONNAISE

½ teaspoon salt
½ teaspoon sugar
⅛ teaspoon paprika
⅛ teaspoon pepper
½ teaspoon dry mustard
juice of 1 lemon
1 egg yolk
1 cup oil
1 tablespoon vinegar

1. Mix the dry ingredients. 2. Add half the lemon juice. Add the yolk. Stir well. 3. Pour the oil in a slow, steady stream onto the egg, beating all the time. 4. When two-thirds of the oil is added, put in the vinegar and the rest of the lemon juice. Beat well. 5. Add the remainder of the oil slowly. Beat well.

If the mixture refuses to thicken, start with another egg yolk and pour the curdled mixture over it slowly and steadily, beating all the time.

THOUSAND ISLAND DRESSING

1. To the above recipe add one-quarter cup thick chili sauce, two tablespoons of chopped green pepper, one hard-cooked egg, chopped fine, and two tablespoons of chopped olives. 2. Mix and serve.

COOKED SALAD DRESSING

1½ tablespoons flour
2 tablespoons sugar
1 teaspoon dry mustard
¾ teaspoon salt
¼ cup vinegar
¾ cup water *or* milk
2 egg yolks
2 tablespoons melted butter
pepper, if desired
whipped cream

1. Mix the flour, sugar, mustard, and salt. 2. Add vinegar. Add water or milk. 3. Cook for twenty minutes in the upper part of a double boiler. Stir frequently. 4. Pour a little of the mixture over the beaten egg yolks. Mix well and then pour this mixture slowly back into the hot sauce. 5. Cook until the mixture coats the spoon. 6. Remove from the fire. Add butter and pepper if desired. 7. When the dressing is cold, fold in the whipped cream, varying the amount according to the type of salad or the strength of dressing desired.

SALADS

(See discussion of salads on pages 95–98 for further suggestions.)

CHICKEN SALAD

2 tablespoons lemon juice
¼ teaspoon salt
2 cups cooked chicken, cut in cubes
1 cup celery, cut in small pieces
½ cup cooked peas
1 cup white grapes, seeded
mayonnaise
lettuce

1. Mix the lemon juice and salt with the chicken, celery, peas, and grapes. 2. Add mayonnaise sufficient to hold the mixture together but not enough to make it pasty.

COMBINATION SALAD

Salad Dressing

¾ cup salad oil
¼ cup lemon juice
1 teaspoon salt
½ teaspoon paprika
½ teaspoon pepper
½ teaspoon dry mustard

Salad Ingredients

1 cup cooked beans
1 cup cooked peas
1 cup kidney beans, cooked
¼ cup chopped green olives
¼ cup chopped ripe olives
½ cup celery strips
1 cup Swiss cheese, cut in small strips
lettuce

1. Combine ingredients for dressing. Beat or shake well. 2. Chill. 3. Arrange salad ingredients on lettuce leaves. 4. Dress with salad dressing.

FROZEN FRUIT AND CHEESE SALAD

1 large package cream cheese
1 cup heavy sour cream
2 tablespoons lemon juice
1/8 teaspoon salt
1 cup canned pineapple, diced
1 cup Malaga grapes, seeded
1 cup canned Queen Anne cherries, pitted
1 banana, sliced
1 cup whipping cream
3/4 cup mayonnaise
1/2 cup marshmallows, quartered
lettuce

1. Work cheese, sour cream, lemon juice, salt together. 2. Add the diced and sliced fruit, well drained. Add stiffly beaten whipped cream. 3. Fold in mayonnaise and marshmallows. 4. Pour in a freezing tray. Set in freezing compartment of the refrigerator. The salad takes approximately three hours to freeze. 5. Serve in cubes or slices on lettuce leaves.

MACARONI SALAD

2 cups cooked macaroni
1 cup chopped celery
6 sweet pickles, chopped
1 green pepper, chopped
3 pimientos, chopped
1 cup American cheese, cubed or grated
1/2 cup cooked peas
mayonnaise
lettuce

1. Cook macaroni until tender in boiling, salted water. Drain. Cut in small pieces. Measure macaroni after it has been cooked. 2. Add the remaining ingredients. 3. Combine lightly with salad dressing. 4. Serve on lettuce.

SHRIMP SALAD

2 cups cooked shrimps
2 hard-cooked eggs
1 cup diced celery
1/2 cup cooked peas
French dressing
lettuce
mayonnaise
stuffed olives

1. Wash shrimps. Remove small black line which encircles each shrimp. 2. Cut each shrimp into halves. 3. Cut eggs into small pieces. 4. Combine shrimps, eggs, celery, and peas and marinate with French dressing. 5. Drain, arrange on lettuce. Garnish with mayonnaise and stuffed olives.

STUFFED PEPPER SALAD

pimiento cheese	green peppers
chopped nut meats	lettuce
chopped parsley	French dressing

1. Prepare a filling of pimiento cheese, finely chopped nut meats, and chopped parsley. 2. Select smooth, well-shaped peppers. Cut off tops. Remove pith and seeds. 3. Stuff firmly with cheese mixture and set in refrigerator to chill for a half day. 4. With a sharp knife slice peppers crosswise, making the slices one-third inch thick. 5. Serve on lettuce with French dressing.

TOMATO AND GRAPE SALAD

tomatoes	chopped salted almonds
lettuce	French *or* Roquefort dressing
white grapes	

1. Choose firm good-sized tomatoes. Peel, hollow, and chill. 2. Arrange on lettuce leaves. Fill each tomato with chilled white grapes. These may be the seedless variety such as Thompson, or the Malaga grape which must be seeded and cut into halves. 3. Sprinkle with chopped salted almonds. 4. Serve French or Roquefort dressing with salad.

DESSERTS

(See discussion of desserts on pages 98–104, 144–145 for further suggestions.)

CHOCOLATE BLANC MANGE

¾ square unsweetened chocolate	⅛ teaspoon salt
1½ tablespoons hot water	½ cup cold milk
1½ cups milk	2 egg whites
3 tablespoons cornstarch	½ teaspoon vanilla
¼ cup sugar	

1. Cut the chocolate in small pieces. Put in upper part of double boiler. Add hot water. Heat until chocolate is melted. 2. Add one cup milk. Heat. 3. Mix the cornstarch, sugar, and salt with cold milk. Add to the first mixture. Stir frequently. Cook for twenty minutes. 4. Remove from the fire. 5. Add the stiffly beaten egg whites and the flavoring. 6. Serve cold.

SOFT CUSTARD

2 cups milk
3 egg yolks
¼ cup sugar
⅛ teaspoon salt
½ teaspoon vanilla

1. Heat milk in upper part of double boiler. 2. Beat the egg yolks slightly. Add the sugar and the salt. 3. Pour the hot milk slowly over this mixture. 4. Return to a double boiler and cook until a spoon dipped into the mixture is coated with the custard. Remove from the fire and the hot-water bath at once. 5. Cool and flavor.

BAKED CUSTARD

Temperature: 350° F. Time: about 40–45 minutes

3 eggs
¼ cup sugar
⅛ teaspoon salt
2 cups milk
grated nutmeg

1. Beat the eggs slightly. 2. Add the sugar and salt. 3. Combine with the milk. 4. Strain into custard cups or a baking pan. 5. Sprinkle with nutmeg. 6. Set the custard cups or baking dish in a pan of hot water in a preheated oven. Bake the required time, or until a silver knife blade, inserted in the middle of the custard, comes out clean. Do not let the water bath boil.

CREAMY RICE PUDDING

Temperature: 325° F. Time: about 3 hours

⅓ cup uncooked rice
4 cups milk
½ cup sugar
½ teaspoon salt
grated rind ½ lemon

1. Wash the rice. 2. Mix with the remaining ingredients. 3. Pour into a buttered baking dish. Set in a preheated oven. 4. Stir the rice up from the bottom three times during the first hour. Stir it once during the second hour. This prevents the rice from settling and gives the pudding a creamy appearance, since the slightly browned milk top is folded in. 5. Bake the required time.

TAPIOCA CREAM

3 tablespoons quick-cooking tapioca
1 pint milk
2 eggs
1/8 teaspoon salt
1/3 cup sugar
1/4 teaspoon almond extract

1. Place tapioca in a fine sieve. Let cold water run over tapioca for a few moments. Drain. 2. Put tapioca, milk in the upper part of a double boiler and cook until the tapioca is soft and clear. 3. Beat the yolks of the eggs. Add the salt and sugar. Combine slowly with the tapioca mixture. 4. Cook over hot water for two minutes. 5. Remove from the fire. 6. Fold in the stiffly beaten egg whites. 7. Season when cold.

EGGLESS TAPIOCA PUDDING

1/4 cup granulated tapioca
1/2 cup sugar
3 cups hot fruit juice
1/8 teaspoon salt
1/2 teaspoon flavoring

1. Wash tapioca. Put in the upper part of a double boiler. Add sugar, fruit juice, and salt. 2. Cook until the tapioca is transparent. 3. Add the desired flavoring. 4. Pour the mixture into either a large mold or individual molds. Chill. 5. Unmold and serve cold with cream or some creamy sauce. When this pudding is made with a bright-colored juice, the result is very effective.

APPLE TAPIOCA

Temperature: 350° F. Time: about 1 hour

1/2 cup granulated tapioca
2 cups boiling water
1/2 cup sugar
1/2 teaspoon salt
8 tart apples
1/4 teaspoon nutmeg

1. Wash the tapioca. Add to the boiling water. Cook in a double boiler until transparent. 2. Add the sugar and the salt. 3. Pare, core, and quarter the apples. Place in a baking dish. 4. Cover apples with the tapioca. Add grated nutmeg. Set in a preheated oven and bake the required time or until the apples are soft.

BROWN BETTY

Temperature: 350° F. Time: about 40 minutes

½ to 1 cup sugar
¼ teaspoon nutmeg
¼ teaspoon salt
2 cups freshly crumbed day-old bread
3 cups sliced or chopped apples
2 tablespoons lemon juice
2 teaspoons grated lemon rind
¼ cup water
2 tablespoons butter

1. Mix the sugar, spice, and salt. (The quantity of sugar to be used will depend upon the acidity of the apples.) 2. Place one-third of the crumbed bread in a greased baking dish. 3. Cover this layer with one-half of the apples. Over them sprinkle one-half of the sugar, spice, and salt mixture. 4. Repeat this process. 5. Mix the lemon juice, lemon rind, and water. Pour this over the contents of the baking dish. 6. Top with the remaining one-third of crumbed bread. Dot with small pieces of butter. A small quantity of boiling water may then be added if the apples are not sufficiently juicy. Cover. Set in a preheated oven and bake the required time. The top of the pudding will become crusty if the cover of the baking dish is removed after twenty-five minutes of cooking.

Brown Betty may be served hot or cold with marshmallow sauce.

MARSHMALLOW SAUCE

1 cup sugar
5 tablespoons water
20 marshmallows
¼ cup cream
1/16 teaspoon salt
1 teaspoon vanilla

1. Boil the sugar and the water thoroughly to 236° F. or until it spins a thread. 2. Melt the marshmallows in the cream, using the upper part of a double boiler. 3. Pour the sirup slowly over the marshmallow mixture. Beat well. 4. Flavor with vanilla.

FRUIT JUICE MARSHMALLOW SAUCE

Canned or cooked fruit juice may be substituted for the water in the marshmallow sauce recipe.

APPLE CRISP

Temperature: 350° F. Time: about 30–40 minutes

2 cups sliced apples
½ cup water
1 teaspoon cinnamon
¾ cup flour
½ cup butter *or* substitute
⅞ cup sugar

1. Place the sliced apples in a greased baking dish. 2. Pour the water over them and sprinkle with the cinnamon. 3. Work together the flour, butter, and sugar to a crumbly consistency. Sprinkle this over the apples. 4. Set in a preheated oven and bake for the required time. Serve hot.

This dessert is most satisfactory when made with apples that cook quickly. It is necessary to have the baking dish almost filled if a crisp topping is desired.

APPLE SLUMP

Temperature: 400° F. Time: about 35–45 minutes

apples
sugar
powdered cinnamon
biscuit dough
butter

1. Butter a deep earthenware pudding dish. Fill it nearly full with pared and quartered apples. 2. Sprinkle with one-half cup of sugar and a little powdered cinnamon. 3. Make a rich biscuit dough. Cover the apples with it. 4. Set in a preheated oven and bake the required time. 5. Then invert on a hot plate. The apples will be on top. Dot them over with bits of butter and more sugar and cinnamon. 6. Serve hot with hard sauce.

BERRY GRUNT

1 pint berries
1½ cups all-purpose flour
2 teaspoons baking powder
¼ teaspoon salt
2 tablespoons butter
½ cup milk
sugar

1. Cook berries in a small amount of water until the fruit is soft but not broken. 2. Sift and measure flour, add baking powder, salt and sift again. 3. Melt butter. Combine with milk. Add to dry ingredients. Mix lightly. 4. Fill a deep baking dish with the berries. Sweeten slightly. 5. Place the dough on top of berries. Set dish into a kettle of boiling water, coming to within an inch of the top. Cook steadily about an hour. On no account must the water stop boiling, as this would cause the dough to fall.

This is a very old Nantucket recipe, varied according to the berries in season, but blueberries and huckleberries were preferred. Nutmeg sauce is often served with this dessert.

NUTMEG SAUCE

3 tablespoons flour	2 cups boiling water
1 cup sugar	1 tablespoon butter
1/8 teaspoon salt	1/2 teaspoon grated nutmeg

1. Mix flour, sugar, and salt. 2. Add boiling water, stirring to prevent lumping. Cook five minutes. 3. Add butter to the hot mixture. 4. Take from the fire and add the grated nutmeg. Serve hot.

BERRY ROLY POLY

Temperature: 350° F. Time: about 40–45 minutes

2 cups all-purpose flour	2/3 cup milk (approx.)
3 teaspoons baking powder	3 cups berries
1/2 teaspoon salt	1 cup sugar
1/3 cup shortening	

1. Sift and measure the flour. Add baking powder and salt. Sift again. 2. Work in the shortening. 3. Add the milk. Mix lightly. 4. Turn onto a lightly floured board. Roll into an oblong shape, about one-third inch thick. 5. Spread the berries on the dough. Sprinkle with the sugar. 6. Moisten the edges of the dough with cold water. Roll up and press the edges together. 7. Place in a greased baking pan. 8. Brush the top of dough with milk and melted butter. 9. Set in a preheated oven and bake the required time.

Serve hot with sweetened cream or top milk.

UPSIDE-DOWN CAKE

Temperature: 350° F. Time: about 30 minutes

Fruit

- 1 tablespoon butter
- ¼ cup brown sugar
- 4 slices canned pineapple

Sponge Cake Dough

- 2 eggs
- ½ cup sugar
- 1½ tablespoons cold water
- ½ cup cake flour
- ¼ teaspoon salt
- ½ teaspoon baking powder
- ½ teaspoon vanilla
- almonds, blanched

1. Butter a pudding dish. Sprinkle with brown sugar. 2. Drain pineapple slices. Place them in bottom of pudding dish. 3. Cook in oven for ten minutes. 4. Remove the dish from the oven. Set aside while preparing cake batter. 5. Beat the yolks, add sugar and beat again. 6. Add the water. 7. Sift and measure flour. Add baking powder and salt. Sift again. Add to the first mixture. 8. Add vanilla and blanched almonds, if desired. 9. Add the stiffly beaten egg whites. 10. Pour cake batter over pineapple slices. 11. Set in a preheated oven and bake the required time. 12. For serving, invert upside-down cake onto large serving plate. Serve with or without sauce or cream.

STEAMED PUDDING

- ½ cup sugar
- ½ cup all-purpose flour
- 1 teaspoon baking powder
- ½ teaspoon salt
- ½ teaspoon baking soda
- ½ cup finely grated raw potato
- ½ cup grated raw carrot
- ¼ cup milk
- ½ cup seedless raisins
- ½ cup currants

1. Mix and sift dry ingredients. 2. Add the finely grated raw potato, carrot, and milk. Add the raisins and currants. 3. Mix thoroughly. 4. Pour into a buttered mold. Cover. Place in perforated steamer over boiling water. 5. Steam for two hours. 6. Serve hot with lemon sauce.

LEMON SNOWBANK SAUCE

3 tablespoons lemon juice
grated rind ½ lemon
½ cup confectioners' sugar
2 egg whites

1. Add the lemon juice and grated rind to the sugar. Stir until it partially dissolves. 2. Beat the egg whites until stiff. 3. Combine the two mixtures and beat until well blended. 4. Serve at once.

SAILOR'S DUFF

2 tablespoons shortening
3 tablespoons sugar
1 egg, beaten
½ cup molasses
1½ cups all-purpose flour
¼ teaspoon salt
1 teaspoon ginger
1 teaspoon baking soda
½ cup boiling water

1. Cream shortening. Add sugar, beaten egg, molasses. 2. Sift and measure flour. Add salt, ginger, and baking soda. Sift again. 3. Add to first mixture. 4. Add boiling water. 5. Pour into a buttered mold. Cover. 6. Steam for one and one-half hours. 7. Serve hot with foamy sauce.

YELLOW FOAMY SAUCE

½ cup butter
1 cup confectioners' sugar
1/16 teaspoon salt
1 egg
½ teaspoon vanilla extract

1. Place the butter and confectioners' sugar in the upper part of a double boiler. 2. When creamy add the egg yolk and the flavoring. 3. Continue cooking and beating until the mixture has thickened slightly. 4. Fold in the stiffly beaten egg white and serve at once.

One-quarter cup orange juice may be used in place of the vanilla extract. When this substitution is made the orange juice is added at the same time as the stiffly beaten egg white.

VIENNOISE PUDDING WITH SABAYON SAUCE

Temperature: 325° F. Time: about 35–45 minutes

- ¼ cup sugar cooked to caramel
- ¼ cup boiling water
- ¼ cup sugar
- 1½ cups milk
- 1 egg and 1 yolk
- 1 cup finely crumbed day-old bread
- ½ cup dried currants
- ½ teaspoon salt
- ½ teaspoon cinnamon

1. Put one-quarter cup dry sugar in frying pan. Set over fire. Cook until sugar is a light brown liquid. 2. Add boiling water. Cook until mixture is smooth. 3. When mixture has cooled, add one-quarter cup granulated sugar, milk, and eggs, slightly beaten. 4. Mix the crumbs with the fruit and seasonings. Add to the first mixture. 5. Butter custard cups. Dust with sugar. 6. Pour pudding mixture into cups. Set these in a pan of hot water. Bake in a preheated oven for the required time or until the puddings give the custard test. 7. Turn from the molds and serve hot with Sabayon sauce.

SABAYON SAUCE

- 1 egg and 1 yolk
- ⅓ cup sugar
- grated rind 1 orange
- ½ cup canned raspberry juice

1. Beat the whole egg and the yolk. 2. Beat in the sugar gradually. 3. Set over hot water. 4. Add the orange rind and the raspberry juice. Cook, beating continuously, until the sauce is as thick as a cooked custard. 5. Remove at once to a dish of cold water to stop the cooking. Serve with the hot pudding.

APRICOT WHIP

- 1¼ cups cooked apricots
- ½ cup sugar
- 1 tablespoon lemon juice
- ⅛ teaspoon salt
- 3 egg whites

1. To prepare the cooked apricots, wash, add small amount of boiling water. Cook for twenty minutes. Measure the required amount of apricots that have been cooked. Put through a sieve. 2. Add the sugar, lemon juice, salt to the purée. 3. Beat the

egg whites until stiff. Fold into the apricot mixture. Beat until creamy. 4. Chill. 5. Serve with soft custard sauce, whipped cream, or smooth cream.

This same recipe may be used for cooked prunes.

GINGERBREAD

Temperature: 400° F. Time: about 25 minutes

4 tablespoons butter
¼ cup sugar
¼ cup molasses
⅓ cup thick sour cream
1 egg

1 cup all-purpose flour
⅓ teaspoon baking soda
⅓ teaspoon baking powder
1 teaspoon ginger
¼ teaspoon salt

1. Cream the butter. 2. Add the sugar, molasses, sour cream, and the egg slightly beaten. 3. Sift and measure flour. Add baking soda, baking powder, ginger, and salt. Sift again. Add dry ingredients to the first mixture. 4. Pour batter into an oiled baking pan. Set in a preheated oven and bake the required time.

CAKE

(See discussion of cakes on pages 136–140 for further suggestions.)

SPONGE CAKE

Temperature: 300° F. Time: about 1 hour, 15 minutes

1 cup cake flour
1 cup sugar
5 eggs
¼ teaspoon salt
3 tablespoons boiling water

¾ teaspoon cream of tartar *or*
1 teaspoon fresh lemon juice
½ teaspoon vanilla (used only with cream of tartar)

1. Sift flour. Measure and sift again. 2. To it add one-half of the sugar. Set aside. 3. Beat the egg yolks until they are light yellow in color. 4. Add the remaining half cup of sugar, approximately two tablespoons at a time. Beat between each addition. 5. Add the boiling water, one tablespoon at a time, beating between each addition. 6. Beat the egg whites, adding the cream of tartar, if used, during the beating. 7. Beat the

egg-sugar mixture once more. 8. Add about four tablespoons of the flour-sugar mixture. Beat. Continue adding flour-sugar mixture, four tablespoons at a time, until it is all in, beating between additions. 9. Fold in the beaten egg whites. Add flavoring. 10. Pour into an ungreased tube pan. Set in a preheated oven and bake the required time.

After removing the cake from the oven, invert the pan on a cake cooler for about one hour and then take the cake from the pan.

ANGEL-FOOD CAKE

Temperature: 275° F., 30 minutes
325° F., 30 minutes

Time: about 1 hour

- 1 cup cake flour
- 1 cup egg whites (8 to 10)
- ¼ teaspoon salt
- 1 teaspoon cream of tartar
- 1¼ cups sugar
- ¾ teaspoon vanilla
- ¼ teaspoon almond extract

1. Sift the flour, measure, and sift again. 2. Beat the egg whites and salt on a large platter with a flat wire whisk. When foamy, add cream of tartar and continue beating until the eggs are stiff enough to hold up in peaks, but not dry. 3. Fold in the sugar carefully. 4. Fold in the flavoring. 5. Sift a small amount of flour over the mixture and fold in carefully. Continue until all is used. 6. Pour the batter into an ungreased angel-food pan. Set in a preheated oven and bake for thirty minutes. Increase heat and bake the remaining time. 7. Remove from the oven and invert pan for one hour, or until cake is cold.

PLAIN LAYER CAKE

Temperature: 350° F.–375° F.

Time: about 35 minutes

- ½ cup butter
- 1 cup sugar
- 1 teaspoon vanilla
- 2 eggs
- 2 cups cake flour
- 3 teaspoons baking powder
- ¼ teaspoon salt
- ¾ cup milk

1. Cream shortening with three-quarters of the amount of sugar. Add flavoring. Add egg yolks. Cream again. 2. Sift and measure flour. Add baking powder and salt. Sift again. 3. Add

dry ingredients and milk alternately to the first mixture, putting in about one-third of each at a time. 4. Fold in egg whites, beaten stiffly, into which the remaining quarter of the sugar has been beaten. 5. Put batter into lightly greased pans. If pan is filmed with flour do it sparingly. 6. Make a slight depression in the center of the batter in the pans, since the tendency is to rise highest at this point. 7. Set in a preheated oven.

There are four ways of telling when a cake is baked or "done":

1. The cake separates from the sides of the pan.
2. The surface of the cake rebounds when pressed lightly with the finger.
3. A cake tester, similar to a broom straw, comes out clean when inserted into the cake. If the cake is not thoroughly baked, the tester will have particles of dough clinging to it.
4. Take the cake from the oven. Hold it to the ear, and listen. If there is a singing sound, the cake is not baked. There is absolutely no sound when the cake is done.

TWO-EGG CAKE *

Temperature: 375° F. Time: about 30–35 minutes

1½ cups cake flour	2 eggs, unbeaten
¼ teaspoon salt	½ cup milk
1¾ teaspoons double action baking powder	⅓ teaspoon grated lemon rind
1 cup sugar	1 teaspoon grated orange rind
	½ cup vegetable shortening

Have all ingredients at room temperature. Start oven, setting regulator at 375° F. Grease the bottom of a square pan, 9 × 9 × 2 inches. Film with flour.

Sift, measure, and sift flour with other dry ingredients. Add grated rinds to milk. Put unbeaten eggs in small bowl.

If using electric mixer, set it at low speed. If mixing by hand be prepared to count the mixing strokes.

Cream shortening lightly in mixing bowl. Add dry ingredients, the eggs, and one half the milk. Beat for two clock-minutes or

* Adapted from "Mix-Easy" Lemon-Orange Cake; General Foods Corporation.

give 200 mixing strokes. Add the remaining milk. Scrape down the sides of the bowl. Beat for two clock-minutes or give 200 strokes.

Pour batter in pan, set in preheated oven.

Frost, if desired, with twice-cooked frosting.

Note: if tartrate baking powder is used, allow three teaspoons.

MARBLE CAKE

Use the recipe for Plain Layer Cake

Before dividing the batter and putting it into the pans reserve one-third and color it with two tablespoons of melted chocolate or with a few drops of vegetable coloring, pink, green, or yellow.

Using two mixing spoons, put the mixtures into the pans alternately and in irregular amounts, so that a marbled effect is gained.

SPICE CAKE

Temperature: 375° F. Time: about 35–40 minutes

⅓ cup butter
1⅓ cups brown sugar
2 eggs
½ cup milk
1¾ cups all-purpose flour
3 teaspoons tartrate baking powder
½ teaspoon salt
½ teaspoon cinnamon
½ teaspoon grated nutmeg

1. Soften or cream the butter. 2. Add all the remaining ingredients at one time and beat for three minutes. A large wooden cake spoon is best for the beating. 3. Pour into an oiled cake pan. Set in a preheated oven and bake the required time.

LADY GOLDENGLOW CAKE

Temperature: 375° F. Time: about 20 minutes

½ cup shortening
1½ cups sugar
grated rind ½ orange
1 egg and 1 yolk
2½ cups cake flour
¼ teaspoon salt
4 teaspoons tartrate baking powder
1 cup milk
1½ ounces chocolate

1. Cream shortening. Add sugar and orange rind. 2. Add beaten egg yolks. 3. Sift and measure flour. Add salt and

baking powder. Sift again. Add dry ingredients and milk alternately to the first mixture. 4. Fold in beaten egg white. 5. Divide batter into two parts. 6. To one part add the melted chocolate. 7. Put by tablespoonfuls, alternately dark and light batter, into three greased and floured layer-cake pans. 8. Set in a preheated oven and bake the required time.

ROLLED JELLY CAKE

Temperature: 350° F. Time: about 12 minutes

3 eggs	1 teaspoon tartrate baking powder
1 cup sugar	½ tablespoon milk
1 cup cake flour	1 tablespoon melted butter
¼ teaspoon salt	jelly

1. Beat the eggs, without separating, until light. 2. Add the sugar. Beat. 3. Sift and measure the flour. Add salt and baking powder. Sift again. 4. Fold dry ingredients and milk lightly into the eggs and sugar. 5. Add the melted butter. 6. Oil a dripping pan. Line with parchment paper, or omit oiling and use paraffin paper. 7. Pour in the cake mixture, spreading evenly. 8. Set in a preheated oven and bake the required time. 9. Quickly remove cake from the pan, turning the cake out onto a piece of paper sprinkled with powdered sugar. Remove the paper from the bottom of the cake. Do this at once. 10. Cut off the crusts or edges. 11. Spread with jelly, which has been beaten to a spreading consistency. 12. Roll the cake quickly.

The secret in getting a good rolled jelly cake lies in working swiftly before the cake stiffens, and in cutting off all of the hard crusts which would break in rolling.

POUND CAKE

Temperature: 300° F. Time: about 1¼ hours

1 pound butter	1 pound flour
1 pound sugar	½ teaspoon mace
10 eggs	¼ teaspoon salt

1. Cream the butter. 2. Add the sugar gradually. Mix well. 3. Add the egg yolks. Mix well. 4. Add stiffly beaten egg

whites. 5. Sift and measure flour. Add mace and salt. Sift again. Add to the first mixture. Beat vigorously for five minutes. 6. Line deep loaf pan with paraffin paper. Fill with batter. Set in a preheated oven and bake the required time.

Pound cake is usually baked in a loaf. It is not iced. Currants may be added, or finely sliced citron. This is one of the best English cakes and is particularly good for afternoon tea.

DARK FRUIT CAKE

Temperature: 200° F.

Steaming time: about 3 hours
Baking time: about 1 hour

1 pound butter
1 pound sugar (2 cups)
10 eggs
1 pound flour (4 cups)
1 teaspoon salt
¼ teaspoon baking soda
1 teaspoon mace
1 nutmeg, grated
1 tablespoon allspice
1 tablespoon cinnamon
2 pounds currants
2 pounds raisins
¼ pound lemon peel
¼ pound orange peel
1½ pounds citron
½ pound chopped nut meats
1 cup molasses
4 squares baking chocolate
½ cup grape juice, cider, *or* coffee
1 glass currant jelly

1. Cream butter, add sugar, egg yolks. 2. Sift and measure flour. Mix with salt, baking soda, and spices. Sift again. 3. Add to the first mixture. 4. Add fruits, nut meats, molasses, melted chocolate, grape juice, and jelly. Mix well. 5. Fold in beaten egg whites. 6. Line heavy pans with paraffin paper or use oven-glass baking dishes. Cover pans tightly. 7. Place pans in steamer. Steam three hours. 8. Remove from the steamer. Remove the covers. 9. Set the cakes in a preheated oven and bake the required time.

CHOCOLATE ICE-BOX CAKE

¼ cup sugar
2 squares chocolate
2 tablespoons water
2 eggs
½ cup butter
1 cup confectioners' sugar
¼ teaspoon salt
¼ teaspoon vanilla
lady fingers

1. Place sugar, chocolate, and water in the upper part of a double boiler. Cook until the chocolate and sugar have blended with the water. 2. Add the beaten egg yolks. Cook until thick, stirring constantly. 3. Cool. 4. Cream butter. Add the confectioners' sugar. Cream again. Add egg mixture. 5. Fold in stiffly beaten egg whites, salt, and vanilla. 6. Pour a layer of the mixture into a loaf-cake pan. Cover with a layer of lady fingers. Repeat until all the mixture is used, finishing with a layer of lady fingers. 7. Set in refrigerator for twelve hours. 8. At serving time unmold and top with whipped cream, if desired.

MERINGUES

Temperature: 275° F. Time: about 40–50 minutes

½ teaspoon salt	4 egg whites
1 teaspoon cream of tartar	1 cup sugar

1. Add salt and cream of tartar to the egg whites. 2. Beat until the egg whites are stiff and no longer foamy but still retain their glossy, smooth appearance. 3. Add sugar in quarter-cup portions. Beat until the mixture peaks. Shape with bowls of two spoons or a pastry bag into mounds. 4. Set in a preheated oven and bake the required time.

The meringues will be crisp and lightly browned on the outside. The inner, under part may be slightly underdone. Remove this soft inside with a spoon while the meringues are still warm.

Meringues need to be baked on something which conducts the heat very slowly. An oven-glass baking dish, slightly oiled, is best. Lacking that use a baking sheet on which you have placed a sheet of heavy dry paper. Do not use paraffin paper.

SCHAUM TORTE

Temperature: 300° F. Time: about 1½ hours

6 egg whites	1 teaspoon vanilla *or* ½ teaspoon almond extract
2 cups sugar	1 teaspoon vinegar

1. Beat the egg whites until stiff enough to hold up in peaks. 2. Beat in two tablespoons of the sugar. Repeat until six table-

spoons have been used, beating thoroughly after each addition. 3. Add the flavoring, the vinegar, and fold in the rest of the sugar. 4. Oil a spring form. Pour two-thirds of the mixture into it. 5. Shape the remainder into small kisses, using the bowls of two teaspoons. 6. Shape them on a baking sheet in the form of a circle, the same size and shape as the spring form. 7. Set in a preheated oven and bake the required time. 8. Remove from the form when cold. Fill with whipped cream and berries, or with ice cream, and decorate the top with the circle of small kisses.

Score Card for Butter Cake

Appearance:[1]		
	Top	10
	Volume	15
Crust:		
	Color	5
	Texture	5
	Tenderness	5
Crumb:		
	Color	5
	Texture	15
	Moisture content	5
	Lightness	5
Flavor:[2]		
	Blended; pleasing	30
	Total	100

A perfect cake is slightly rounded on the top, its thickness is in the right proportion to its size so that it does not look unbalanced. The color of the crust is a warm gold; its texture is not sugary or sticky. The crust is tender. The crumb has a rich color, never grayish. The crumb is slightly moist but not soggy, is evenly porous and is feathery light. The flavor is balanced and pleasing.

Icing really should be scored by itself. Perfect icing is put on neatly but not fussily, is in the right proportion to the volume of the cake so that it does not overbalance the flavor of the cake itself. Perfect icing is easily handled.

[1] If cake is iced, score 5 for appearance of icing and 5 for appearance of cake top.
[2] If cake is iced, score 20 for flavor of cake and 10 for flavor of icing.

ICINGS

PORTSMOUTH ICING

2 tablespoons cream
1 teaspoon melted butter
confectioners' sugar
flavoring

1. Heat cream, add butter. 2. Stir in sugar until of consistency to spread. 3. Flavor.

SEVEN-MINUTE ICING

1 egg white
⅔ cup sugar
2 tablespoons cold water
¼ teaspoon cream of tartar
flavoring

1. Place first four ingredients in top of double boiler and beat with egg beater until mixed. 2. Place over rapidly boiling water, and beat constantly with egg beater until frosting will stand in peaks. This time is usually seven minutes, hence the name. 3. Remove from fire. Add one-half teaspoon vanilla or other flavoring. 4. Beat until thick enough to spread.

One to two squares of melted chocolate, candied fruit, raisins, dates, or figs cut in pieces, or chopped nut meats may be folded in just before mixture is spread on the cake.

TWICE-COOKED FROSTING

¼ cup granulated sugar
1¼ cups brown sugar
⅓ cup water
2 egg whites
¼ cup English walnut meats, broken
½ teaspoon black walnut flavoring *or*
1 teaspoon vanilla

1. Boil sugars and water until mixture threads. 2. Beat egg whites. Pour sirup gradually, while beating constantly, on egg whites. Continue the beating until mixture is nearly cool. 3. Put in upper part of double boiler. Cook, stirring constantly, until mixture becomes granular around the edge of pan. 4. Beat with a spoon until mixture will hold its shape. 5. Add nut meats and flavoring. Pour on cake. Spread with back of spoon, leaving a rough surface.

COOKIES

(See discussion of cookies on pages 140–143 for further suggestions.)

BROWNIES

Temperature: 350° F. Time: about 30 minutes

½ cup cake flour
½ teaspoon baking powder
½ teaspoon salt
2 eggs
1 cup sugar
2 squares chocolate
¼ cup shortening
½ teaspoon vanilla
½ cup broken walnut meats

1. Sift and measure flour. Add baking powder and salt. Sift again. Set aside. 2. Beat eggs until light. Add sugar. Beat again. 3. Put chocolate and shortening in upper part of double boiler until chocolate is melted. 4. Add to the egg-sugar mixture. 5. Add vanilla, dry ingredients, and nut meats. Mix well. 6. Put into greased shallow pan. Set in a preheated oven and bake for the required time. Cool slightly. Cut into squares. Dust with powdered sugar if desired.

CINNAMON STARS

Temperature: 350° F. Time: about 15 minutes

5 egg whites
1 pound confectioners' sugar
juice 1 small lemon
2 teaspoons cinnamon
1 pound almonds

1. Beat egg whites until stiff, add confectioners' sugar. Stir in one direction for one-half hour or fifteen minutes in electric beater. 2. Add lemon juice, cinnamon and grated unblanched almonds. 3. Let stand in cold place for two or three hours. Take out small portions and pat one-quarter inch thick on a board covered with mixture of half flour and half granulated sugar. Cut in stars. 4. Glaze with confectioners' sugar moistened with rose water. 5. Bake in a preheated oven for the required time.

CORNFLAKE MACAROONS

Temperature: 350° F. Time: about 10–12 minutes

2 egg whites
1 cup sugar
¼ teaspoon salt
1 teaspoon flavoring
2 cups cornflakes
1 cup grated coconut

1. Beat the egg whites until stiff, adding the sugar and salt gradually. 2. Add the flavoring. 3. Fold in the cornflakes and the grated coconut. 4. Put on baking sheets, using two teaspoons for shaping the small macaroons. 5. Set in a preheated oven and bake the required time.

FILLED COOKIES

Temperature: 375° F. Time: about 10 minutes

Cookie Dough

1 egg
1 cup sugar
1 cup sour cream
4 cups pastry flour
½ teaspoon salt
2 teaspoons tartrate baking powder
½ teaspoon baking soda
1 teaspoon lemon extract

Filling

½ cup sugar
⅛ teaspoon salt
1 tablespoon cornstarch
¼ cup chopped figs
½ cup chopped raisins
juice of ½ lemon
¼ cup boiling water

1. Beat the egg and add to the sugar and cream, mixing well. 2. Sift and measure the flour. Add the salt, baking powder, baking soda. Sift again. 3. Add to the first mixture. 4. Add the lemon extract. 5. Chill, roll thin, and cut in rounds. 6. Place one teaspoon of filling on one-half of the cookies. Cover with the remaining cookies. 7. Press together slightly, sprinkle with sugar, and set in a preheated oven. Bake for the required time.

To make the filling: 1. mix the sugar, salt, cornstarch. 2. Add the chopped figs and raisins, lemon juice, and water. 3. Cook over the fire until the mixture has thickened. 4. Cool before using.

FOUNDATION COOKIE RECIPE

Temperature: 300° F. Time: about 8–10 minutes

¾ cup butter
2 cups sugar
1 egg and 1 yolk
3½ cups all-purpose flour
4 teaspoons tartrate baking powder
½ teaspoon salt
1 egg white
2 tablespoons sugar
⅓ teaspoon cinnamon

1. Cream the butter. 2. Add the sugar and the whole egg beaten with the extra egg yolk. 3. Sift and measure flour. Add baking powder and salt. Sift again. Add to the first mixture. 4. Chill the dough. 5. Roll on a lightly floured board until the dough is one-eighth inch thick. Cut into fancy shapes with cookie cutters. 6. Brush the cookies with the lightly beaten egg white and sprinkle with blended sugar and cinnamon. 7. Set in a preheated oven and bake the required time.

GINGERBREAD MEN

Temperature: 375° F. Time: about 10 minutes

½ cup shortening
¾ cup molasses
¼ cup brown sugar
1 egg
3 cups flour
½ teaspoon salt
1 teaspoon ginger
½ teaspoon cinnamon
¼ teaspoon baking soda
3 teaspoons tartrate baking powder

1. Melt the shortening. Add the molasses and brown sugar. Add the well-beaten egg. 2. Sift and measure flour. Add salt, spices, and the leavenings. Sift again. Add to first mixture. 3. Chill thoroughly. 4. Roll out and cut into shapes, using a cookie cutter, or a paper pattern and a sharp knife. 5. Put on a cookie sheet. Set in a preheated oven and bake the required time.

Cloves, currants, raisins, citron, orange peel, or rice may be used for features and buttons. After baking, tinted frosting may be put on the dresses of the Gingerbread Ladies.

HAZELNUT MACAROONS

Temperature: 350° F. Time: about 15 minutes

- ¼ pound shelled almonds
- 1 pound shelled filberts *or* hazelnuts
- 1 pound confectioners' sugar
- few grains salt
- 4 to 6 egg whites

1. The almonds are blanched and ground, or grated. The filberts are toasted in a medium oven until the thin skin loosens. These are also ground. 2. Add to the almonds, sifted sugar, and salt. 3. Stir in enough unbeaten egg white to make a soft mass. Much depends on the size of eggs used. 4. Force the mixture through a press into small cookies which may be ornamented with cherries, almonds, or other fruits. 5. Set in a preheated oven and bake the required time or until a delicate brown.

If stored in airtight containers, the cookies retain their soft and "gooey" consistency for weeks.

Bake a little of this mixture in paper candy cups, decorating the tops with bits of cherry and almond, and leaves of sliced pistachio nut. When baked, insert a curved handle of angelica and the little fruit basket is complete.

REFRIGERATOR COOKIES

Temperature: 400° F. Time: about 8 minutes

- 1 cup butter
- ¾ cup brown sugar
- ½ cup white sugar
- 1 egg and 1 yolk
- 3½ cups all-purpose flour
- ½ cup seeded raisins
- ½ teaspoon baking soda
- ½ teaspoon salt
- 1 teaspoon cinnamon
- 1 tablespoon lemon juice
- ¾ cup chopped nut meats

1. Cream the butter. Add the sugar. Cream again. 2. Add the eggs, beaten slightly. 3. Sift and measure the flour. 4. Sprinkle part of it over the raisins. 5. Add the baking soda, salt, and cinnamon to the remaining flour. Sift again. Add the creamed butter mixture. Add lemon juice, nut meats, and raisins. Mix well. 6. Pack in a mold and chill for twelve hours. 7. At the end of that time take from the mold and cut in crosswise slices.

With a spatula place these on a cookie sheet. 8. Set in a preheated oven and bake the required time.

A baking-powder tin, the refrigerator butter dish, a small bread tin, or the specially made molds for these cookies may be used. If you choose the first three types of molds line them with paraffin paper, leaving long ends of the paper extending at each end. This affords you tabs with which to pull out the dough. With the specially made molds this lining with paper is not necessary because the mold is made in two pieces, leaving the dough easily accessible.

These cookies are sometimes called Ice-box or Butterscotch Cookies.

PASTRY

(See discussion of pastry on pages 132–135 for further suggestions.)

FLAKY PIE CRUST

1½ cups pastry flour	6 tablespoons fat
¼ teaspoon salt	4 to 6 tablespoons ice-cold water

1. Sift, measure the flour. Add the salt. Sift again. 2. Cut fat in with blades of two knives working like scissors. 3. When the mixture resembles coarse sawdust, add the water. Only enough should be added to make it possible to gather the material in a loose ball. 4. Cover and set in cool place for one-half hour. 5. Put half of the mixture on lightly floured board. Roll until the paste is one-quarter inch thick. 6. Lay in pie plate, fitting well. Cut off overhanging edge. 7. Put in the filling. 8. Wet the rim of the crust with cold water. 9. Roll top crust, making small opening in center. 10. Lay on the filled pie plate. Trim overhanging edges. Press the edges together. Crimp or flute the edges.

It is best to chill the pie before setting it in the preheated oven.

The utensil called a pastry blender is excellent for cutting fat into the flour.

HOT-WATER PIE CRUST

¼ cup water	½ teaspoon salt
½ cup fat	¼ teaspoon baking powder
1½ cups pastry flour	

1. Bring the water to boil, add the shortening. Stir until smooth. Remove from fire. 2. Sift and measure the flour. Add the salt and the baking powder. Sift again. 3. Combine the dry and wet ingredients. Stir until smooth. 4. Set away to chill for twelve hours. 5. Proceed as for flaky crust.

APPLE PIE

Temperature: 450° F., 10 minutes; 350° F., 40 minutes — Time: about 50 minutes

- unbaked pie crust
- 2 to 3 cups apples
- ¾ to 1 cup sugar
- 1 teaspoon nutmeg *or* cinnamon
- 1 tablespoon butter

1. Line pie plate with pastry. Set in refrigerator until ready to be filled. 2. Pare, core, and slice or quarter the apples. 3. Put one-quarter of the sugar on the bottom of the pie crust. 4. Add apples, fitting them closely and filling plate to rounding. 5. Cover with remaining sugar. Season. Dot with butter. 6. Put on top crust or lattice strips. 7. Set in a preheated oven for ten minutes. Reduce heat and bake the required time.

A lattice-top apple pie should be set in the oven uncovered for ten minutes. Then invert a large pie plate over entire pie. Leave this on for one-half hour to hold in heat which cooks apples. Just before taking from oven put two tablespoons of heavy cream over the apples in lattice-top pie.

BERRY PIES

Temperature: 450° F., 10 minutes; 350° F., 20–30 minutes — Time: about 40 minutes

- unbaked pie crust
- 2 to 3 cups berries
- 3 tablespoons flour
- ½ to ¾ cup sugar
- 1 tablespoon butter

1. Line pie plate with pastry. Set in refrigerator until ready to be filled. 2. Wash, pick over, and drain the fruit. 3. Mix the flour and the sugar. Put one-quarter of this mixture on bottom of pie crust. Mix remainder with fruit. 4. Pour into pie crust.

Dot with butter. 5. Cover with top crust or with lattice strips. Moisten bottom rim before affixing lattice strips. 6. Set in a preheated oven and bake for ten minutes. Reduce heat and bake the required time.

The amount of berries depends on the size of plate. Any plate should be well filled.

One tablespoon of granulated tapioca may be substituted for flour.

INDIVIDUAL CHESS PIES

Temperature: 400° F., 10 minutes
325° F., 20 minutes
Time: about 30 minutes

unbaked pie crust
½ cup butter
1 cup sugar
3 eggs
1 cup raisins
1 cup English walnut meats
1 teaspoon lemon juice
⅛ teaspoon salt
whipped cream

1. Line individual muffin tins or patty pans with pastry. Set in refrigerator until ready to be filled. 2. Cream the butter and the sugar. 3. Add the slightly beaten eggs. Mix well. 4. Add the seedless raisins and the coarsely chopped walnut meats, lemon juice, and salt. 5. Fill pastry shells with the fruit mixture. 6. Set in a preheated oven and bake for ten minutes. Reduce heat and bake the required time. 7. When cool, serve with whipped cream.

LEMON CAKE PIE

Temperature: 450° F., 10 minutes
325° F., 20 minutes
Time: about 30 minutes

unbaked pie crust
2 eggs
1 lemon, juice and rind
½ teaspoon salt
1 cup milk
1 cup sugar
2 tablespoons flour
1 tablespoon melted butter

1. Line pie plate with pastry. Set in refrigerator until ready to be filled. 2. Separate egg whites from egg yolks. 3. Add the grated rind and juice of the lemon to the egg yolks. Add the salt. Add the milk and the dry ingredients. Add the melted butter. 4. Fold in the stiffly beaten egg whites. 5. Pour into pie crust.

Set in a preheated oven for ten minutes. Reduce heat and bake the required time.

The top of this pie is like sponge cake, and the bottom of the filling like a custard.

LEMON MERINGUE PIE

Temperature for meringue: 350° F. Time: about 10–12 minutes

- baked pie shell
- 3/4 cup sugar
- 1 lemon, juice and rind
- 2 eggs
- 1 cup water
- 1 tablespoon flour
- 1/8 teaspoon salt
- 3 tablespoons cornstarch
- 1 tablespoon butter

Meringue

- 2 egg whites
- 4 tablespoons sugar
- few grains salt
- 1 teaspoon lemon juice

1. Bake pie shell. Set aside to cool. 2. Put sugar in a saucepan. Add the lemon juice and grated rind. Before the sugar is all dissolved add the egg yolks and stir well. 3. Add three-quarters cup of water. Bring the mixture to a boil. 4. Stir flour, salt, and cornstarch with the remaining quarter cup of water. Add to the boiling mixture. Stir well and cook until the mixture is translucent. 5. Add the butter. 6. Pour the filling into a baked pie shell. 7. Make a meringue by beating the egg whites until foamy, adding the sugar, salt, and lemon juice, and beating until the mixture stands in peaks. 8. Spread on the filled pie shell, being careful to bring the meringue in contact with the pastry rim at all points. 9. Set the pie in a preheated oven and bake the required time to brown the meringue.

BAKED PIE SHELLS [1]

Temperature: 450° F. Time: about 10 minutes

Follow directions given for making pie crust and lining pie plate (page 571). Then proceed:

[1] Reprinted through the courtesy of M. Barrows and Company, Inc., taken from *Pies A-Plenty* by Florence La Ganke Harris, copyright, 1940.

Build up a substantial rim. Be sure to clinch the outer edge of crust under the rim of pie plate. Unless this is done the rim starts slipping into pie plate.

The pie crust must be held down lest it buckle and rise. Three methods are suggested for avoiding this:

1. Fill plate at least two-thirds full with dry beans or rice. The weight keeps the crust in place as it bakes. The dry material is emptied after baking is completed and kept for use at another time.

2. A glass pie plate of the same size may be well buttered on the outside and set in the lined pie plate. A heavy plate is required to keep the crust in place.

3. Prick the crust with sharp-tined fork. Have pricks close together, especially at junction of side and bottom of plate. Do not tear the crust, but prick deeply enough to allow trapped air to escape through the pricked openings.

When no rim is required the pie crust may be fitted over the outside of a pie plate. This is then placed, crust side up, in the hot oven and baking proceeds. The crust does not slip or buckle, which may prove sufficient compensation for lack of attractive rim. Bake in a preheated oven the required time.

Tart Shells

Tart shells are made by shaping the crust over the outside of tart pans or by lining tart pans or muffin-tin wells with crust. The edges may be fluted or pinched at four points to make a decorative rim.

Bake as directed for pie shells.

LEMON CHIFFON PIE

baked pie shell
1 tablespoon gelatin
¼ cup cold water
4 eggs
1 cup sugar
½ cup lemon juice
½ teaspoon salt
1 teaspoon grated lemon rind
whipped cream

1. Bake pie shell. Set aside to cool. 2. Hydrate gelatin in cold water. 3. Put the egg yolks, sugar, and lemon juice in the

upper part of a double boiler. Beat well and cook over the hot water until the mixture thickens. 4. Add the hydrated gelatin, salt, and grated lemon rind. Stir until the gelatin is dissolved. 5. Fold into this the well-beaten egg whites. 6. Pour into pie shell. Set in cool place. 7. At serving time the pie is topped with lightly sweetened whipped cream.

PEACH CHIFFON PIE

baked pie shell	½ cup sugar
1½ tablespoons gelatin	⅛ teaspoon salt
¼ cup cold water	1 egg white
1 cup crushed peaches	1 cup cream, whipped
1 tablespoon lemon juice	whipped cream for garnishing

1. Bake pie shell. Set aside to cool. 2. Hydrate gelatin in cold water. 3. Dissolve over low flame, watching carefully. 4. Cool slightly. 5. Stir into crushed peaches which have been mixed with the lemon juice, sugar, and salt. 6. Fold into stiffly beaten egg white and into cream which has also been whipped. Put in pie shell or in tart shells. Chill until firm. 7. Garnish with whipped cream before serving.

PUMPKIN PIE

Temperature: 450° F., 10 minutes; 325° F., 40 minutes — Time: about 50 minutes

unbaked pie crust	¾ cup sugar
¼ tablespoon cinnamon	2 cups pumpkin purée
¼ tablespoon nutmeg	2 cups sweet cream
⅛ teaspoon ginger	3 eggs
¼ tablespoon salt	

1. Line pie plate with pastry. Set in refrigerator until ready to be filled. 2. Combine spices, salt, and sugar. 3. Add these to the strained stewed pumpkin. 4. Add the cream. 5. Beat the egg whites, add yolks to whites. 6. Combine the mixtures. Pour into pie crust. 7. Set in a preheated oven and bake for ten minutes. Reduce heat and bake the required time, or until a knife blade, inserted in the center, comes out clean.

APRICOT AND CREAM CHEESE TURNOVERS

Temperature: 400° F. Time: about 12 minutes

3 cakes cream cheese
6 tablespoons shortening
2 cups flour
½ teaspoon salt
2 teaspoons baking powder
cooked apricots

1. Cream the cheese with the shortening. 2. Add the sifted dry ingredients. Work into a dough and set in the refrigerator overnight. 3. In the morning roll the dough thin. 4. Cut into four-inch squares. 5. Place an apricot in the center, fold over to a triangle and press the edges together. 6. Place on a greased tin. Set in a preheated oven and bake the required time or until brown. 7. Sprinkle with powdered sugar and serve.

TURNOVERS

Left-over scraps of pastry or freshly made and chilled pastry may be rolled into squares or circles. A fruit mixture may be put in the center of the lower half, the edges of the pastry moistened with cold water, and a small cutting or design made in the upper half of the pastry. This is then folded over and pressed firmly on the moistened edge of the lower half. The turnovers are baked in a 400° F. oven until brown. Apple sauce, apricot purée, mince meat, or a raisin mixture may be used as filling.

BANBURY TARTS

Tarts are correctly named when they are made of pastry shells filled with a rich fruit mixture, such as raspberry preserves or jam. But a Banbury tart — so named in England — is really a turnover.

Filling

1 cup seedless raisins
1 cup sugar
1 egg
1 tablespoon flour
¼ cup chopped walnut meats
1 lemon, juice and rind

1. Combine the ingredients. Mix well. 2. Use as a filling following the directions given for turnovers.

CREAM PUFF SHELLS

Temperature: 450° F., 25 minutes
325° F., 20 minutes — Time: about 45 minutes

1 cup water	¼ teaspoon salt
½ cup butter	4 eggs
1 cup flour	

1. Boil water. Add the butter. 2. Set the saucepan over the fire and bring the mixture back to the boiling point. Stir in all the flour. Stir until smooth. 3. Remove the saucepan from the fire. Add one unbeaten egg. Beat it in, using a large spoon, until the mixture is no longer slippery. 4. Add a second egg. 5. Repeat the process and continue until the four eggs are in. 6. Using two spoons, shape the mixture into rounds. About one tablespoon of dough makes a large cream puff shell. 7. Place the rounds about four inches apart on the baking sheet. 8. Put into a preheated oven and bake for twenty-five minutes. Reduce heat and bake the required time. The puffs should have a hollow sound when tapped. 9. When the shells cool, make a slit at one side and put in a cream filling, ice cream, sweetened whipped cream, or even a thick creamed-chicken mixture.

The shells may be cut into halves and used at luncheon in place of patty shells.

The shells may be made of only one teaspoon of dough. When baked, they are about the diameter of a silver dollar. These may be slit and filled with a creamed hot paté de foie gras, creamed chicken, or one or two preserved strawberries from strawberry jam. These little dainties, called "bouchées," are frequently served at elaborate afternoon teas.

TIMBALES

Temperature: 360° F. — Deep fat frying time: about 1–1½ minutes

¾ cup flour	1 egg
½ teaspoon salt	½ cup milk
2 teaspoons sugar	1 tablespoon olive oil

1. Sift and measure the flour. Add the dry ingredients and sift again. 2. Beat the egg slightly. 3. Add the milk to the dry ingredients. 4. Combine the wet and the dry ingredients. Stir until smooth. 5. Add the olive oil.

A timbale iron is shaped something like a giant thimble. It has corrugated sides and is made of solid metal. A handle with a bend close to the timbale iron itself is inserted. A rosette iron has the same sort of handle, but instead of being made of solid metal is shaped, as its name suggests, like a simplified rosette. Sometimes it is shaped like a heart.

To make timbales or rosettes it is necessary to have a deep-fat frying kettle. Bring the fat in the kettle to a temperature of 360° F.

The iron is allowed to remain in the fat while it is heating. When ready to make the timbales, the iron is removed from the fat, wiped lightly on crushed tissue paper, and then dipped into the timbale batter. A thin film of it adheres to the hot iron. The iron should not be entirely submerged in the batter, but put in to about two-thirds of its height. Remove the timbale iron from the batter and put at once into the hot fat. Cooking takes from one to one and one-half minutes. Invert the timbale iron, letting the fat drain. Slip the timbale onto crushed tissue paper.

Timbale cases may be filled with creamed chicken, buttered peas, creamed lobster, or other hot dishes of this type. They may be dusted with powdered sugar and filled with fresh strawberries. These combinations are also used with rosettes.

Score Card for Pie

Appearance:	
Top	15
Volume	10
Crust:	
Color	10
Texture	15
Richness	5
Filling:	
Consistency	10
Texture	5
Flavor:	30
Total	100

The thickness of the pie should be in good relation to its diameter. The top, either meringue or crust, is a pleasing brown in color and tidy in shape. The crust is thoroughly browned, rich, but not greasy looking. It may be flaky or crumbly as evidenced by small blisters. It does not look smooth and tough. The filling retains its shape when the lukewarm or cold pie is cut. The filling is thoroughly cooked. The flavor is a pleasing balance of filling and pie crust with no rancid or starchy taste.

FROZEN DESSERTS

(See discussion of frozen desserts on pages 146–152 for further suggestions.)

FRESH-FRUIT ICE CREAM

1 pint fresh-fruit pulp
1 cup sugar
1 pint heavy cream
few grains salt

Strawberries, red raspberries, and peaches are the three best fruits for this ice cream. 1. Wash and hull strawberries or pick over red raspberries or pare and pit peaches. 2. Mash fruit somewhat and add sugar. Allow to stand for an hour. 3. Put through purée sieve. 4. To the pulp add the cream and few grains salt. Add more sugar if necessary. If peaches are flavorless, add a few drops of almond extract. One tablespoon lemon juice may help to bring out the raspberry flavor. 5. Put in dasher freezer, using proportion of eight parts ice to one of salt. Freeze until stiff. 6. Remove dasher and repack the ice cream. Cover securely in freezer can. Pour off part of brine. Add more salt and ice. Stand in cold place for two hours for ice cream to ripen.

SHERBET WITH CITRUS FRUITS

1 cup water
1 cup sugar
1 teaspoon gelatin
2 tablespoons cold water
grated rind 1 lemon
grated rind 1 orange
1 cup orange juice
3 tablespoons lemon juice

1. Make a sirup of water and sugar. 2. Hydrate gelatin in cold water. 3. Add to the hot sirup. Cool somewhat. 4. Add grated rind and juice. Add more fruit juices or sugar if necessary. 5. Freeze in dasher freezer, using the proportion of eight parts ice

to one of salt. 6. Follow same procedure as for ice cream after the sherbet is frozen.

FROZEN DESSERTS USING MECHANICAL REFRIGERATOR

BANANA MARLOW

(**Marlows** call for marshmallows to give substance and prevent the mixture from becoming grainy as it freezes.)

- 30 marshmallows
- 3/4 cup boiling water
- 1 cup fruit pulp
- 1 tablespoon lemon juice
- few grains salt
- 1 1/2 cups cream

1. Melt the marshmallows in boiling water. 2. Add the fruit pulp (banana is suggested). 3. Cool. 4. Add lemon juice, salt, and cream which has been whipped. 5. Freeze according to the instructions which you received with your mechanical refrigerator.

STRAWBERRY MOUSSE

(**Mousses** call for the addition of gelatin to give substance and prevent mixture from becoming grainy as it freezes.)

- 1 cup fruit pulp
- 1/2 tablespoon gelatin
- 1/8 cup cold water
- 1/2 cup sugar
- 2 cups heavy cream
- few grains salt
- 1 tablespoon lemon juice

1. Prepare fruit pulp (strawberry is suggested). 2. Hydrate gelatin in cold water. 3. Add to sugar. Heat the mixture, stirring well until sugar and gelatin are dissolved. 4. Add to fruit pulp. 5. Cool. 6. Whip cream. 7. Add with remaining ingredients and follow freezing directions which came with your refrigerator.

CHOCOLATE ICE CREAM

(**Tapioca** is used on occasions to give substance and prevent the mixture from becoming grainy.)

- 2 squares chocolate
- 2 cups cold milk
- 3 tablespoons granulated tapioca
- 1/8 teaspoon salt
- 1/2 cup sugar
- 1/4 cup light corn sirup
- 2 egg whites
- 2 teaspoons vanilla
- 1 cup heavy cream

1. Grate or shave chocolate. 2. Heat with milk in upper part of double boiler until dissolved. 3. Add tapioca and cook twenty minutes longer. Stir frequently. 4. Strain this mixture while hot through a fine sieve. 5. Add remaining ingredients with exception of cream. 6. Cool mixture. 7. Whip cream. Fold in. Follow general freezing directions which came with your refrigerator.

FRUIT ICE CREAM

(**Evaporated milk** is used to give substance and prevent mixture from becoming grainy as it freezes.)

1 teaspoon gelatin	1 cup evaporated milk
¼ cup cold water	2 cups fresh-fruit pulp
1 cup powdered sugar	1 cup whipping cream
¼ teaspoon salt	¼ teaspoon almond extract

1. Hydrate gelatin in cold water. 2. Add it with sugar, salt, and milk to fruit pulp. Mix thoroughly. 3. Fold in whipped cream and almond extract. 4. Follow the freezing directions which came with your refrigerator.

PEANUT BRITTLE MOUSSE

¼ pound peanut brittle	1½ cups heavy cream
½ teaspoon vanilla	

1. Crush brittle with rolling pin. 2. Add one-half cup cream. Add vanilla. 3. Whip remainder of cream. Add to first mixture. 4. Freeze according to directions given with your refrigerator, or in dasher freezer.

CANDY

(See discussion of candy on pages 166–167 for further suggestions.)

FONDANT

2 cups sugar	2 tablespoons light corn sirup
1¼ cups water	½ teaspoon vanilla.

1. Put the sugar, water, and corn sirup in a saucepan. Cook, stirring constantly, until the sugar is dissolved. Remove spoon and do not stir again during cooking. 2. Wash crystals away from sides

of the pan with a small brush wet in water. 3. Cook to 240° F. 4. Remove from fire and pour on cold wet slab or platter. 5. Cool to lukewarm temperature. Add vanilla. Beat with a heavy paddle or spatula until fondant is white and creamy. 6. Knead until smooth. 7. Place in a crock covered with a damp cloth and allow to ripen twenty-four hours.

BUTTER FONDANT

1 pound plain fondant
1½ ounces butter
½ teaspoon vanilla

1. Knead the fondant as you would bread. 2. Add the butter and vanilla and continue kneading until creamy.

FONDANT NUT PATTIES

Make these in white, pink, green, and yellow, using three-quarters of a cup of fondant, one drop of flavoring, two tablespoons of chopped nut meats, a speck of coloring. Use flavoring *oil*, not the essence or extract.

1. Melt the fondant in a bowl over hot water. 2. When soft enough to stir, add the flavoring oil and color, mixing well. Then add the nut meats. 3. Drop by spoonfuls on wax paper and allow to dry before handling.

SUPER-FUDGE

4 ounces chocolate
2 cups sugar
⅔ cup milk
2 tablespoons light corn sirup
2 tablespoons butter
2 teaspoons vanilla
¾ cup fondant

1. Shave the chocolate in small pieces so that it will melt easily. 2. Put the sugar, milk, chocolate, and corn sirup into a saucepan and cook slowly, stirring until the sugar is dissolved. Cook to 236° F. 3. Remove from the fire, add the butter. 4. Pour on slab to cool. 5. When lukewarm (110° F.), add the vanilla and fondant. 6. Beat until the fudge has lost its glossy appearance and can be molded.

FUDGE LOGS

1. Make a roll of butter fondant five and one-half inches long and three-quarters of an inch in diameter. 2. Pat out super-fudge to a sheet measuring six inches long, four inches wide, one-third inch in thickness. 3. Place the butter fondant on the fudge and wrap the fudge around it. 4. Roll lightly, using both hands, until smooth and regular in shape. 5. Roll in chopped nut meats. 6. Cut into slices three-quarters inch thick.

FUDGE MARBLES

1. Mold the fudge into balls about three-quarters of an inch in diameter. 2. Roll them in chopped nut meats, coconut, or chopped peanut brittle.

GLACÉ FRUITS AND NUT MEATS

1½ pounds sugar	⅛ teaspoon cream of tartar
1 cup water	½ teaspoon vanilla
	candied fruits or nut meats

1. Put all the ingredients in a kettle on the stove, stir until dissolved, and then cook to 310° F. without stirring. Wash crystals from sides of pan during cooking. 2. Remove from the fire. Stir in vanilla. 3. Drop pieces of nut meats or of candied fruits into the glacé, one at a time, taking them out with a fork, and placing them on an oiled marble slab.

Use English walnut halves, pecan halves, candied red cherries, pineapple cubes, colored candied fruit.

CANDIED ORANGE PEEL

4 oranges	2 cups water
4 cups sugar	

1. With the point of a knife cut the skin or peel from four oranges. Cut it in quarters. 2. Put the peel in a saucepan and cover it with cold water. Heat it to the boiling point and drain off the water. 3. Repeat the process. 4. Cook the peel in a sirup made from the sugar and water, until the peel is tender. 5. Drain

in a coarse sieve. 6. Slice the peel and drop slices in granulated sugar spread in a pan. Roll each completely. 7. Serve rolled in sugar or dipped in chocolate.

HAYSTACKS

1 cup sugar	½ cup molasses
¼ cup corn sirup	¼ teaspoon salt
¼ cup condensed milk	1 pound shredded coconut
¼ cup water	2 tablespoons butter

1. Mix sugar, sirup, milk, water, molasses, and salt. 2. Cook to the soft-ball stage. 3. Add the coconut and butter. Pour out on a greased platter to cool. 4. When cool enough to handle, form into cone-shaped haystacks.

Candy Temperatures

Fudges	234° to 236° F. = soft ball
Fondant	238° to 240° F. = soft ball
Caramels	246° to 250° F. = firm ball
Taffy	265° to 270° F. = hard ball
Butterscotch, Toffee, etc.	290° to 300° F. = firm crack
Brittles	300° to 310° F. = hard crack

CANNING

From the charts note that pressure cooking canning is used for everything but tomatoes and fruits. Most foods are pre-cooked for about three minutes and then packed, hot as can be, into the clean jars. An empty inch is left at the top of each jar.

At least four types of lids are available. Screw tops call for jar rings of rubber to cushion and seal the screw top on the jar rim. Jar rings are used with glass tops also, whether fastened with bail or metal ring. The fourth type of cover has its own sealing composition affixed to its under side.

The screw top is screwed on tightly, then loosened by turning it back about one half inch. After these processed jars are removed from the canner this top is immediately and gently tightened. The other tops are not turned. The bail is pushed down at once on that type of closure. The metal band on the other two types is not removed until the food is cold.

Canning Time Table for Standard Fruits

Product	Method of Treatment Before Canning	Hot-Water Bath Boiling (Minutes)	Syrup
Apples	Wash — quarter or halve — place in salt bath — rinse — boil 1 minute in syrup — pack — cover with boiling syrup. Or — Boil whole in syrup until tender or bake as for serving, and cover with syrup — pack hot. Or — Pack hot in form of apple sauce	15	Medium to Heavy
Apricots	Wipe with damp cloth to remove fuzz — peel if desired — blanch — halve and pit — pack — cover with boiling syrup	20	Medium to Heavy
Berries (Except Strawberries)	Wash — stem — pack in jars — cover with boiling syrup	20	
	Or pre-cook and pack hot	5	Medium to Heavy
Cherries Sweet Sour	Wash — stem — pit — pack — cover with boiling syrup	20	
	Or remove pits, add sugar as desired, bring to boil and pack	10	Medium to Heavy
Currants	Wash — stem — pack in jars — cover with boiling syrup	20	Medium to Heavy
	Or pre-cook and pack hot	5	
Figs	Wash — drain — rinse — cover with boiling syrup	30	Medium to Heavy
Gooseberries	Same as other berries	20	Medium to Heavy
Grapes	Same as berries	20	Light to Medium
Peaches	Select firm, ripe peaches — blanch — cold-dip — peel — pack — cover with boiling syrup	20	Heavy to Extra Heavy
Pears	Select firm, ripe or slightly under-ripe pears — pare — quarter — place in cold salt bath — rinse — boil in syrup — pack — cover with boiling syrup .	20	Light to Medium
Pineapple	Peel — remove eyes — cut, slice or shred — pack cold — cover with boiling syrup	30	Light to Medium
Plums	Wash — prick skins — pack cold — cover with boiling syrup	20	Medium to Heavy
	Or bring to boil, using sugar as desired — pack hot into jars	10	
Rhubarb	Wash — cut into small pieces — pack — cover with boiling syrup	20	Heavy
	Or pre-cook and pack hot	5	
Strawberries	Wash — stem — add 1 to 2 cups sugar to 1 quart — let stand 2 hours. Boil gently 3 minutes — let stand over night — pack	5	Medium
	If reheated on second day — pack . .	5	
Fruit Juices	Crush fruit — heat slowly — strain — fill jars to overflowing. 1 to 2 cups sugar to gal.	5	

Note. If canning fruit in Steam Pressure Cooker, process at 5 pounds pressure for 10 minutes if packed cold; for 5 minutes if packed hot, with the following exceptions — process Apricots, Figs, and Peaches 10 minutes; Pears, 8 minutes; Pineapple, 25 minutes.

SYRUP FOR FRUITS

Syrup	Amount of Sugar to Liquid	To Make
Light	1 part sugar to 3 parts water or fruit juice	Mix and boil until sugar dissolves. Keep hot.
Medium	1 part sugar to 2 parts water or fruit juice	
Heavy	1 part sugar to 1 part water or fruit juice	
Extra Heavy	2 parts sugar to 1 part water or fruit juice	
Corn syrup	1 pt. corn syrup, 1 pt. sugar, $\frac{1}{2}$ pt. water, $\frac{1}{8}$ teaspoon salt	

All fruits may be canned with plain water or with unsweetened fruit juice.

Canning Time Table for Standard Vegetables[1]

PRODUCT	PREPARATION BEFORE CANNING	STEAM PRESSURE Pounds	Minutes
Asparagus	Wash — grade — keep tips above water — boil 3 minutes — pack	10	40
Beans — Green or Wax	Wash — string — boil 5 minutes — pack	10	35–55
Beans — Lima and Butter	Shell — grade — boil 5 to 10 minutes — pack loosely	10	55–65
Beets	Wash — retain 1-inch stems — boil 15 minutes — slip skins — pack	10	35–40
Brussels Sprouts — Cabbage	Wash — boil 10 minutes — add salt — pack	10	35
Cauliflower	Soak in cold brine — boil 3 minutes — pack	10	35
Carrots	Wash — scrape — boil 5 minutes — pack	10	35–40
Corn (on cob)	Boil on cob 5 minutes — pack	10	75
Corn	Boil on cob 5 minutes — cut from cob — loosely pack	10	90
Corn and Lima Beans (Succotash)	Boil each product 5 minutes — combine corn and beans — loosely pack	10	70
Eggplant	Peel — cut into ¼- to ½-inch slices — boil 3 minutes — pack — do not add salt	10	50
Greens (Including Spinach)	Steam in covered vessel for 15 minutes or until wilted — use smallest possible amount of water — loosely pack	10	75
Kohlrabi and Turnips	Wash — boil 15 minutes — slice — pack	10	60
Mushrooms	Wash — skin if necessary — boil 3 minutes — pack	10	35
Okra	Wash — remove cap — boil 3 minutes — pack	10	40
Parsnips	Wash — scrub — boil 15 minutes — pack	10	35–40
Peas	Shell — grade — boil 3 to 5 minutes — loosely pack	10	50–60
Peppers, Bell	Wash — remove seed-pod — boil 5 minutes — flatten — pack	10	15
Peppers, Pimiento	Wash — place in moderately hot oven until skins blister or crack — slip skins — remove seed-pod — pack dry	10	15
Pumpkin or Squash	Wash — cut into pieces — cook until tender — mash — pack	10	95
Sweet Potato	Wash — boil or steam 15 minutes — peel — pack	10	90
Tomatoes	Scald and peel — pack whole or cut into pieces — pack	10	60

[1] All time tables are adapted from "The Ball Blue Book of Canning and Preserving," copyright 1944, Ball Brothers, Muncie, Indiana.

Meat

All meat products should be hot packed and processed in a steam pressure cooker. Directions for cold packing are given for those who prefer to use less reliable methods of packing and processing. The United States Department of Agriculture and all other authorities on home canning advise the use of steam pressure cookers for processing meats.

All canned meat products should be heated to boiling fifteen minutes before tasting.

To Prepare Meat for Canning

Can only the flesh of healthy, correctly slaughtered animals. Confine 24 hours before killing. Give water, but no feed. Neither chase nor frighten before slaughtering. Hang, head down, immediately after killing to permit thorough bleeding. Skin or scrape immediately. Draw, then drench the carcass with cold water to remove blood. Wipe dry with clean cloth. Chill thoroughly — pork, mutton, and veal, 24 to 36 hours; beef, 36 to 48 hours. Avoid freezing. Frozen meat is hard to handle and gives a canned product of poor quality.

Cut meat into pieces of convenient size for cooking or canning. Cut slices across grain and about one inch thick; jar-size pieces with grain; those for stew in uniform cubes or squares.

Trim meat free of excess fat (the less fat used, the better the keeping qualities), heavy connective tissue, gristle, and bruised spots. Bones may be removed or left in, depending upon their size.

Wipe meat with clean, damp cloth, if necessary, but do not let stand in water. Exceptions to this rule: Fish and strong-flavored game are usually soaked in salt water before canning.

Packing

Cold Pack: Pack raw meat into hot jars. Add salt only. The meat will make its own juice.

Hot Pack: Cook meat one-third to one-half done or until the pink color has almost disappeared at the center. Pack while hot. Cooking may be done in any manner. Steaming, baking, boiling, broiling, and roasting are more desirable than frying. Canned fried

meat tends to be dry and lacking in flavor. Meat should not be dipped into flour, meal, batter, or crumbs before canning. Fried meat should be packed with two or three tablespoons of the cooking fat or covered with gravy. Flavor will be much better if gravy is used.

The majority of hot-packed meats have better color and flavor if covered with gravy or broth. From one to two teaspoons salt should be used to each quart of meat, the amount depending upon taste.

Pack pieces of meat up and down in the jar. Leave at least a three-quarters inch space at the top. Avoid crowding.

Process all meat immediately after packing.

To Prepare Poultry for Canning

Confine 12 to 24 hours before killing. Give water, but no feed. Kill 6 to 12 hours before canning. Avoid bruising. Bleed thoroughly. Pluck, singe, and wash with mild soap. Rinse. Cut skin between legs and body. Bend legs until hip joints snap. Slip knife under ends of shoulder blades and cut up to wings. Pull back and breast apart. Remove entrails. Rinse. Dry. Chill. Do not salt.

Note: Use feet in broth. Do not can liver and gizzard with other parts of fowl.

To Prepare Fish for Canning

Prepare fresh, thoroughly bled fish as for cooking. The backbone may be left in small fish; remove it from larger ones.

soft-flesh fish

For mackerel, mullet, trout, whitefish, and other soft-flesh fish: Cut into jar-length pieces and soak in brine (1 cup salt to 1 gallon water) 60 minutes. Drain. Pack into hot pint jars, alternating heads and tails; the skin side next to the glass. Submerge the open jar in a kettle of hot brine (½ cup salt to 1 gallon water). Boil 15 minutes. Remove jars and invert to drain 5 minutes. Process 100 minutes at 10 pounds pressure; then complete seal.

FIRM-FLESH FISH

For salmon, shad, and other firm-flesh fish: Cut into jar-length pieces. Soak in brine (1 cup salt to 1 gallon water) 60 minutes. Drain 10 minutes. Pack into hot pint jars; skin side next to the glass. Add 1 teaspoon salt to each pint. Process 100 minutes at 10 pounds pressure; then complete seal.

Time Table for Processing Meats, Poultry, Fish, Game [1]

This table is for processing quarts and pints at altitudes of 2,000 feet or less. See table (page 591) for processing at higher altitudes.

PRODUCT	PACK	STEAM PRESSURE	
	Read Recipe	Pounds	Minutes
Beef, Lamb, Pork, Veal, etc.	Hot Pack	15	60
	Cold Pack	15	70
All Poultry	Hot Pack	15	60
	Cold Pack	15	70
All Game, Birds, Rabbits, Squirrel, and Venison	Hot Pack	15	60
	Cold Pack	15	70
Fish	Hot Pack	10	90
	Cold Pack	10	100
Shellfish	Hot Pack	10	70

Time Table for Processing Soups and Stews [1]

Brunswick Stew	Hot Pack	15	60
Chicken Gumbo	Hot Pack	15	60
Fish Chowder	Hot Pack	10	100
Purées (nonacid vegetables)	Hot Pack	10	60
Soup Stock	Hot Pack	10	50
Tomato Purée	Hot Pack		
Tomato Soup	Hot Pack	10	35
Vegetable Soup	Hot Pack	10	60

[1] Courtesy of Ball Brothers Company. *Op. cit.*

Table for Processing at High Altitudes [1]

(*Steam Pressure Cooker*)

ELEVATION	PRESSURE USED FOR VEGETABLES	PRESSURE USED FOR MEATS
2,000 feet	10 pounds	15 pounds
3,000 feet	10 pounds	15 pounds
4,000 feet	11 pounds	16 pounds
5,000 feet	11 pounds	16 pounds
6,000 feet	12 pounds	17 pounds
7,000 feet	12 pounds	17 pounds
8,000 feet	13 pounds	18 pounds

NOTE: Cream style corn, pumpkin, and winter squash are processed at fifteen pounds pressure at and below an altitude of 2,000 feet.

Boil all nonacid vegetables, vegetable and meat soups, and all meats fifteen minutes before tasting. Never taste any canned product which has an unnatural odor. Always reboil left-over canned vegetables before serving.

JAM AND JELLY

(See discussion of jelly making on pages 170–173 for further suggestions.)

In using commercial pectin for jelly making, follow the directions that come with the pectin. This is the only way you may be sure of success. In making jelly in the old-fashioned way, follow the accepted method. First, wash the fruit. Since the cooked fruit will be put in a jelly bag, and only the juice be used, it is not necessary to pick fruit from stems, to seed, core, or pare it.

Apples, crabapples, quinces are cooked until soft. Enough water to cover the fruit is put on when cooking starts.

Berries and soft, juicy fruits require no water. The pulp is mashed slightly to start the juice flowing. When the fruits are soft, the mixture is put into a jelly bag. The juice drips through the bag into a container. For the best quality and clearest jelly, the bag is not squeezed to get the maximum of juice. Squeezing the bag forces through some pulp as well, and the resulting jelly is not so clear. This juice is measured and an equal amount or three-quarters as much sugar is set aside.

Bring the juice to a boil. Let it boil for five minutes if the juice is from currants, and from ten to twenty minutes for other fruit

[1] Courtesy of Ball Brothers Company. *Op. cit.*

juices. Add the sugar, which may or may not have been heated. Bring back to the boil and boil for three to five minutes. Skim the surface of the liquid. Pour the clear liquid into clean, hot, jelly glasses. Seal at once with a thin layer of melted paraffin. Next day add a second layer.

FOUR-IN-ONE JAM

1 quart gooseberries	1 quart red raspberries
1 quart sour red cherries	sugar
1 quart currants	½ bottle liquid pectin

1. Head and tail gooseberries, pit cherries, strip currants, pick over raspberries. Measure. 2. Add sugar in the proportion of one cup of sugar to each cup of fruit. 3. Cook in a large preserving kettle over a brisk flame until of the right consistency. Stir frequently, as fruits are heavy and settle to the bottom of kettle. 4. After fifteen minutes' boiling add the liquid pectin. Stir well. Boil one minute longer. Remove from the fire. 5. Pour into clean hot jars.

If more than the above quantity of jam is made at one time the boiling to the correct consistency may be more than fifteen minutes. Too long a cooking time gives the jam a strong flavor, hence the use of pectin.

Paraffin with a thin coat while mixture is still hot. Later, after jam has cooled, add a thicker layer of melted paraffin.

PARADISE JELLY

10 medium-size quinces	1 quart cranberries
20 medium-size sweet apples	sugar

1. Peel and slice the quinces; do not core. Slice the apples; do not peel or core. 2. Wash and pick over the cranberries. 3. Place these three fruits in a preserving kettle with water to cover. Cook until very soft. 4. Put in a jelly bag and let the juice drain. 5. Measure the juice, then boil for twelve minutes. 6. Add an amount of sugar equal to the amount of juice. Cook until test mixture jells. 7. Pour into clean glasses and seal with paraffin.

TABLES AND CHARTS

100-Calorie Portions of Common Foods[1]

FOOD	SIZE OF 100-CALORIE PORTION
Breads, etc.:	
White, Whole wheat, Gluten, Rye	slice $3 \times 3\frac{1}{2} \times \frac{1}{2}$ in., 1.3 oz. (1 thick or 2 thin slices)
Corn	slice, $2 \times 2 \times 1$ in.
Boston brown	slice, $3 \times \frac{3}{4}$ in.
Biscuit, baking-powder	2 (small)
Rolls	1
Griddle cakes	1, 4 in. diam.
Waffles	½, 6 in. diam.
Muffins	¾
Toast	1⅓ slices, thin
Zwieback	3 slices, $3\frac{1}{4} \times 1\frac{1}{4} \times \frac{1}{2}$ in.
Crackers:	
Educator	12
Graham	3
Oatmeal	7
Oyster	24
Saltines	6
Soda	4
Cereals:	
Oatmeal, Cracked wheat, Farina, Corn meal, etc. — cooked, about	¾ c.
Ready to serve:	
Corn flakes, Puffed cereals, etc. — about	1½ c. (scant)
Shredded wheat biscuit	1
Triscuit	2
Grapenuts	2 rounding tbsp.

Abbreviations used:

c. = cup
tbsp. = tablespoon
tsp. = teaspoon
in. = inch
oz. = ounce
lb. = pound

[1] Reprinted through the courtesy of W. B. Saunders Company from *Nutrition and Physical Fitness*, by L. J. Bogert, Ph.D. Copyright 1931 and 1939 by W. B. Saunders Company

100-Calorie Portions of Common Foods (*Continued*)

FOOD	SIZE OF 100-CALORIE PORTION
Macaroni, spaghetti, etc.:	
Plain	¾ c.
With cheese	½ c. (scant)
Cake and cookies:	
Cake:	
Plain	piece, 1¾ in. cube (icing, nuts, fruits, etc. extra)
Chocolate	piece, 2½ × 2½ × 1 in.
Angel or sponge	piece, about 2 in. cube
Gingerbread	piece, 1 × 2 × 2 in.
Plain cookies	1 large or 2 small
Ginger snaps	5
Lady fingers	2–4
Macaroons	2
Doughnuts	½
Pies:	
With top crust	slice, 1½ in. at circumference (¼ large serving)
Without top crust	slice, 2 in. at circumference (⅓ large serving)
Custards, puddings, and desserts:	
Cup custard, Plain blancmange	⅓ c.
Chocolate blancmange	¼ c. (scant)
Plain gelatin	1 c. (scant)
Simple rice pudding, Simple bread pudding, Simple tapioca pudding	½ c. (scant)
Water ices	½ c. (scant)
Ice cream	¼ c. (approx.)
Candies:	
Plain hard candies:	
Peppermints, Molasses candy, Lemon drops, etc. about	1 oz.
Chocolate nut caramels, about	½ oz. (approx. 1 in. cube)
Chocolate creams	1 medium
Chocolate fudge	piece, 1½ × 1 × ¾ in.
Milk chocolate	piece, 2 × 1 × ⅛ in.

100-CALORIE PORTIONS OF COMMON FOODS (*Continued*)

FOOD	SIZE OF 100-CALORIE PORTION
Syrup, Honey, Jam, Jelly	1½ tbsp.
Sugar	2 tbsp. (1½–3 lumps, depending on size)
Meats:	
Any lean meat, about	2 oz. (piece 3 × 2 × ½ in.)
Any fat meat, about	1 oz. (meat part of lamb chop, about 1 oz.)
Sausage	2 small
Bacon	4 small crisp slices
Chicken, broiled or creamed	¼ c. (approx.)
Fish:	
Lean fish	3 oz. (two small servings or piece 3 × 2¼ × 1 in.)
Fat fish	2 oz. (one serving)
Oysters	12
Sardines	4 (1½ oz.)
Salmon, canned; Tuna fish, canned	½ c.
Lobster	¾ c. (4 oz.)
Eggs, whole (75 calories) (1 yolk, 50–60 calories) (1 white, 15–20 calories)	1⅓
Eggnog	½ c. (scant)
Milk and milk products:	
Whole milk (1 glass — 160 cal.)	⅝ c. (5 oz.)
Skimmed milk; Butter milk	1¼ c. (10 oz.)
Cream:	
Thin	¼ c.
Thick	1½ tbsp.
Whipped	1 heaping tbsp.
Evaporated milk (unsweetened)	4 scant tbsp.
Condensed milk (sweetened)	1¼ tbsp.
Milk powder; Malted milk	1 rounded tbsp.

100-CALORIE PORTIONS OF COMMON FOODS (*Continued*)

FOOD	SIZE OF 100-CALORIE PORTION
Cheese:	
Average solid cheese	1 in. cube (approx.)
Cottage	2 heaping tbsp.
Butter (or margarine)	1 level tbsp. (piece, 1 × 1 × ¼ in.)
Olive oil (or other oils and fats)	1 scant tbsp.
Nut butters	1 rounding tbsp.
Nuts:	
Chestnuts	20 small
Almonds or peanuts	10–12 large
Filberts	10
Pecans	5 large
Walnuts (English)	4 large
Brazil	2 large
Coconut (prepared)	⅕ c. (½ oz.)
Cocoa, beverage	⅓–⅗ c. (varying with richness and sweetness)
Chocolate, beverage	¼–½ c. (scant)
Fruits:	
Dried fruits:	
Dates	3–4
Figs	2 (medium-sized)
Raisins and currants	¼ c.
Fresh:	
Banana, Orange	1 large
Grapefruit	½ large
Apples, Pears	2 medium
Peaches	3 medium
Plums, Apricots, Lemons	3–4 large
Olives:	
Ripe, about	6
Green, about	8

100-CALORIE PORTIONS OF COMMON FOODS (*Continued*)

FOOD	SIZE OF 100-CALORIE PORTION
Fruits (*Continued*):	
Pineapple:	
Fresh	2 slices, 1 in. thick
Canned	1 slice and 3 tbsp. juice
Prunes, stewed	2 and 2 tbsp. juice
Berries } about . . .	1 c.
Cherries, stoned } about . . .	1 c.
Grapes	30 (good-sized)
Cantaloupe	1 melon, 4½ in. diam.
Watermelon (edible portion) .	¾ lb. (6 large slices)
Stewed fruits (depending on amount of sugar added)	½ c. approx.
Fruit juices:	
Orange juice } about	1 c.
Grapefruit juice } about	1 c.
Lemon juice } about	1 c.
Grape juice	½ c.
Vegetables (exclusive of butter or sauces added):	
Potatoes:	
White, baked or boiled . . .	1 medium (3 oz.)
White, mashed or creamed . .	⅓–½ c.
Sweet	½ medium
Potato chips	8–10 large pieces
Beans, cooked } about	⅓ c.
Corn, canned } about	⅓ c.
Succotash } about	⅓ c.
Lentils } about	⅓ c.
Peas, canned, about	¾ c.
Beets } about	1 c., cooked (½ lb., plain)
Carrots } about	1 c., cooked (½ lb., plain)
Onions } about	1 c., cooked (½ lb., plain)
Parsnips } about	1 c., cooked (½ lb., plain)
Turnips } about	1 c., cooked (½ lb., plain)
Squash } about	1 c., cooked (½ lb., plain)
Tomatoes, canned } about . . .	2 c.
String beans } about . . .	2 c.
Spinach, cooked } about . . .	2 c.
Tomatoes, raw	2–3 medium

100-Calorie Portions of Common Foods (*Continued*)

Food	Size of 100-Calorie Portion
Vegetables (*Continued*):	
Cabbage (raw, shredded)	5 c.
Cauliflower	1 small head
Asparagus	20 large stalks
Celery	30 stalks
Cucumbers	3, six inches long
Radishes	30
Lettuce	2 good-sized, firm heads
Asparagus, Cabbage, Cauliflower, Celery, Cucumbers, Lettuce, Radishes, Spinach, Tomatoes	1 lb., average
Salads:	
Green salads with French dressing	1–2 servings
Average salad with mayonnaise dressing, about	½ serving
Date and nut salad with mayonnaise dressing, about	¼ serving
Mayonnaise dressing	1 tbsp.
Soups:	
Bouillon or consommé	4 c.
Chicken, vegetable, or thin legume soups, about	1 c.
Cream soups	½ c. (scant)
Sauces:	
Gravy, brown	½ c.
White sauce	¼ c.
Cream sauce	⅙ c.
Lemon sauce	⅛ c.
Tomato sauce	5 tbsp.
Chocolate sauce	2 tbsp.
Hard sauce	1 tbsp.

Comparative Nutritional Chart [1]

Key to Chart: +++ Excellent Source; ++ Fair Source; + Weak Source; Tr. Trace

Name of Food	Vitamins [2]				Minerals [3]				Reaction	
	A	B	C	D	Phos.	Calc.	Iron	Copper	Acid	Alkal.
Vegetables										
Asparagus	++	+++	+	......	+	++	++	++	......	+
Beans, kidney (canned)	+	+++	......	......	+++	++	+++	+++	......	++
Beans, navy	+	+++	......	......	+++	+	+++	++	......	+++
Beans, lima	+	+++	+	......	+++	++	+++	+++	......	+++
Beans, string (cooked)	++	++	......	......	++	++	++	+	......	++
Beans, soy (cooked)	+	+++	......	......	+++	+++	+	+	......	++
Beets (red)	......	+	+	......	+	+	++	++	......	+++
Broccoli	+++	++	++	......	+	++	++	+	......	++
Brussels sprouts	++	+++	++	......	++	+	++	+	......	+
Cabbage (raw)	++	++	+++	......	+	++	++	+	......	++
Cabbage (cooked)	+	++	+	......	+	++	+	+	......	++
Carrots (raw or cooked)	+++	++	+	......	++	++	++	+	......	+++
Cauliflower	+	++	+	......	++	+++	++	++	......	++
Celery	+	+	+	......	+	++	+	......	......	++
Chard	+++	+	......	......	+	+++	+++	+	......	++
Corn (fresh — yellow)	++	++	+	......	++	......	+	++	+	......
Cucumber	+	+	++	......	+	+	+	+	......	++
Dandelion greens (cooked)	+++	++	+	......	++	+++	+++	+	......	++
Lettuce (other leafy salads)	+++	++	+++	......	+	++	+++	+	......	++
Onions (raw)	......	++	++	......	+	+	+	+	......	+
Parsnips	+	++	......	......	++	++	++	+	......	+++
Peas (cooked)	++	++	++	......	+++	+	+++	++	......	++
Pepper (green)	++	+	+++	......	+	++	+	tr.	......	++
Potatoes, sweet (cooked)	+++	++	+	......	+	+	++	+	......	+++
Potatoes, white (baked)	+	++	+	......	++	+	++	+	......	+++
Radishes	......	++	++	......	tr.	......	++	+	......	+
Rutabagas	+	++	++	......	++	++	+	+	......	+++
Spinach (cooked)	+++	+++	++	tr.	++	+++	+++	++	......	+++
Squash (cooked)	++	++	+	......	+	+	+	tr.	......	++
Turnip (cooked)	+	++	+	......	+	++	+	+	......	+
Meats — Fish										
Fish (average)	+	+	......	tr.	+++	+	+	++	+++	......
Kidney (beef)	++	++	......	......	+++	......	+++	+	+++	......
Liver (beef — pig)	++	++	++	+	+++	+	+++	+++	+++	......
Meats (average)	+	++	+	tr.	+++	......	+++	++	+++	......
Oysters (raw)	++	++	+	tr.	+++	++	+++	+++	+++	......
Sweetbreads	+	+	......	......	+++	......	+++	+	++	......

[1] This Chart is compiled from the most authoritative sources available. However, the vitamin and mineral content may vary somewhat with season and locality.

[2] Vitamin G is usually present along with vitamin B. Vitamin E sufficient in normal diet.

[3] Iodine is strong in sea foods. Foods from some localities are weak in iodine due to lack in the soil. Use iodized salt in such cases. Manganese is sufficient in normal diet.

Comparative Nutritional Chart (*Continued*)

NAME OF FOOD	VITAMINS				MINERALS				REACTION	
	A	B	C	D	Phos.	Calc.	Iron	Copper	Acid	Alkal.
Fruits										
Almonds	+	++	......	......	+++	+++	+	+++	......	+++
Apples (raw)	+	+	+	......	+	......	+	+	......	++
Apricots (dried, cooked)	+++	+	+	......	+	+	++	+	......	+
Bananas (raw)	++	++	++	......	++	......	++	++	......	+++
Cantaloupe	++	+	+	......	+	+	+	+	......	+++
Cranberries (cooked 3 min.)	+	......	++	......	+	+	++	++	+	......
Figs	+	++	......	......	+	++	+++	++	......	++
Grapefruit	......	++	+++	......	+	+	+	+	......	++
Grapes	+	++	+	......	+	+	++	+	......	++
Lemon juice (fresh)	+	++	+++	......	+	+	+	tr.	......	++
Orange juice (fresh)	++	++	+++	......	+	++	++	+	......	+++
Pears	+	++	+	......	+	+	+	++	......	++
Pineapple	+	++	++	......	+	+	+	+	......	+++
Peaches	++	+	++	......	+	+	+	+	......	++
Prunes (dried)	+++	++	......	......	++	++	+++	++	+	......
Raisins	+	+	......	......	++	++	+++	++	......	+++
Raspberries (fresh)	......	......	++	......	++	++	++	+	......	++
Tomatoes	++	++	+++	......	+	+	+	+	......	++
Dairy Products										
Butter	+++	......	......	+	......	......	......	......	......	......
Buttermilk	+	++	+	......	+++	+++	+	......	......	++
Cheese (whole)	+++	++	......	+	+++	+++	++	+	+	......
Eggs (yolk)	+++	+++	......	++	+++	++	+++	++	+++	......
Milk (whole)	+++	++	+	+	+++	+++	tr.	tr.	......	++
Grain Products										
Barley	......	++	......	......	++	+	++	++	+	......
Bread (white)	+	+	......	......	++	+	+	++	+	......
Bread (wheat)	+	++	......	+++	++	+	++	++	+	......
Bread (rye)	+	++	......	......	++	+	+	++	+	......
Oatmeal (cooked)	......	+++	......	......	+++	++	+++	++	+++	......
Rice, Whole (cooked)	......	++	......	......	+	......	+	+	+	......
Fats and Oils										
Lard or Olive Oil	+	......	......	......	......	......	......	......	......	......
Margarine	+	......	......	......	......	......	......	......	......	......
Fish Oils	+++	......	......	+++	......	......	......	......	......	......

Copyright, General Baking Company, 1938

Handy Nutritional Notes on Diet and Dieting[1]

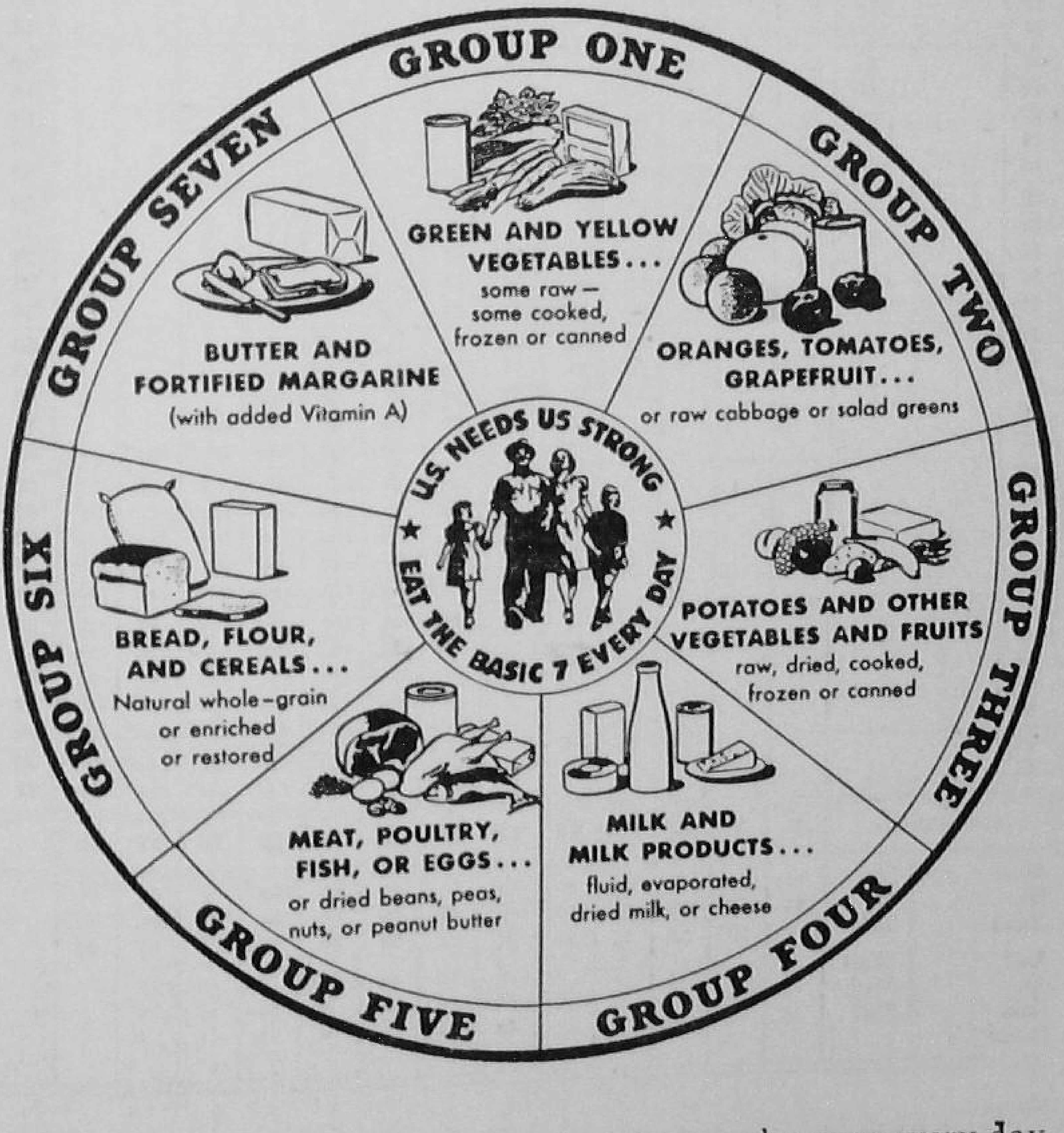
"We no longer condemn any food because it is incomplete in the nutritional sense. The important thing is to understand that most of our foods are incomplete, and must be combined with others which make good their deficiencies. This is just what the 'protective foods' do in a highly efficient degree. . . . The secret of successful nutrition lies in the proper combination of foods such

[1] Reprinted by permission of the General Baking Company.

that what is lacking in one is provided in another. . . . The 'protective foods' are milk, eggs, and leafy vegetables. . . ."

—McCollum & Becker

THE "BASIC 7" FOOD GROUPS



For good health . . . eat some food from each group every day. In addition, eat any other foods you want.

To lose weight, eat less of *all* foods, particularly fats and sugars.

To gain weight, eat more of *all* foods.

Weight is easily controlled this way, for normal persons, and necessary nutritional elements are also properly supplied.

Weight-Height-Age Table for Girls of School Age[1]

By Dr. Bird T. Baldwin and Dr. Thomas D. Wood

Ht. Ins	5 Yrs	6 Yrs	7 Yrs	8 Yrs	9 Yrs	10 Yrs	11 Yrs	12 Yrs	13 Yrs	14 Yrs	15 Yrs	16 Yrs	17 Yrs	18 Yrs	Ht. Ins
38	33	33													38
39	34	34													39
40	36	36	36*												40
41	37	37	37*												41
42	39	39	39												42
43	41	41	41	41*											43
44	42	42	42	42*											44
45	45	45	45	45	45*										45
46	47*	47	47	48	48*										46
47	49*	50	50	50	50	50*									47
48		52	52	52	52	53*	53*								48
49		54	54	55	55	56	56*								49
50		56*	56	57	58	59	61	62*							50
51			59	60	61	61	63	65							51
52			63*	64	64	64	65	67							52
53			66*	67	67	68	68	69	71*						53
54				69	70	70	71	71	73*						54
55				72*	74	74	74	75	77	78*					55
56					76	78	78	79	81	83*					56
57					80*	82	82	82	84	88	92*				57
58						84	86	86	88	93	96*	101*			58
59						87	90	90	92	96	100	103*	104*		59
60						91*	95	95	97	101	105	108	109	111*	60
61							99	100	101	105	108	112	113	116	61
62							104*	105	106	109	113	115	117	118	62
63								110	110	112	116	117	119	120	63
64								114*	115	117	119	120	122	123	64
65								118*	120	121	122	123	125	126	65
66									124	124	125	128	129	130	66
67									128*	130	131	133	133	135	67
68									131*	133	135	136	138	138	68
69										135*	137*	138*	140*	142*	69
70										136*	138*	140*	142*	144*	70
71										138*	140*	142*	144*	145*	71

Age — Years		6	7	8	9	10	11	12	13	14	15	16	17	18
Av. Ht. (Ins.)	Short	43	45	47	49	50	52	54	57	59	60	61	61	61
	Med.	45	47	50	52	54	56	58	60	62	63	64	64	64
	Tall	47	50	53	55	57	59	62	64	66	66	67	67	67
Av. An. Gain (Lbs.)	Short	4	4	4	5	6	6	10	13	10	7	2	1	
	Med.	5	5	6	7	8	10	13	10	6	4	3	1	
	Tall	6	8	8	9	11	13	9	8	4	4	1	1	

Notes:

1. Age is taken at the nearest birthday; height at the nearest inch; and weight at the nearest pound. A girl is considered 6 years old at any time between 5½ and 6½ years.

2. The following percentage of net weight has been added for clothing (shoes and sweaters are not included):
   For weights from 35 to 65 lbs — 3 per cent of net weight is added
   For weights from 66 to 82 lbs — 2.5 per cent of net weight is added
   For weights from 83 lbs and over — 2 per cent of net weight is added

3. The figures not starred represent exact averages in round numbers. The starred figures represent smoothed or interpolated values.

Printed by the Iowa Child Welfare Research Station, State University of Iowa, Iowa City, Iowa

[1] Reprinted through courtesy of World Book Company from "Health Studies." Copyright 1932 by World Book Company

Weight-Height-Age Table for Boys of School Age [1]

By Dr. Bird T. Baldwin and Dr. Thomas D. Wood

HT. INS	5 YRS	6 YRS	7 YRS	8 YRS	9 YRS	10 YRS	11 YRS	12 YRS	13 YRS	14 YRS	15 YRS	16 YRS	17 YRS	18 YRS	19 YRS	HT. INS
38	34	34*														38
39	35	35*														39
40	36	36*														40
41	38	38	38*													41
42	39	39	39*	39*												42
43	41	41	41*	41*												43
44	44	44	44	44*												44
45	46	46	46	46*	46*											45
46	47*	48	48	48	48*											46
47	49*	50	50	50	50*	50*										47
48		52	53	53	53	53*										48
49		55	55	55	55	55	55*									49
50		57*	58	58	58	58	58*	58*								50
51			61	61	61	61	61	61*								51
52			63	64	64	64	64	64	64*							52
53			66*	67	67	67	67	68	68*							53
54				70	70	70	70	71	71	72*						54
55				72*	72	73	73	74	74	74*						55
56				75*	76	77	77	77	78	78	80*					56
57					79*	80	81	81	82	83	83*					57
58					83*	84	84	85	85	86	87					58
59						87	88	89	89	90	90	90				59
60						91*	92	92	93	94	95	96				60
61							95	96	97	99	100	103	106*			61
62							100*	101	102	103	104	107	111	116*		62
63							105*	106	107	108	110	113	118	123	127*	63
64								109	111	113	115	117	121	126	130*	64
65								114*	117	118	120	122	127	131	134	65
66									119	122	125	128	132	136	139	66
67									124*	128	130	134	136	139	142	67
68										134	134	137	141	143	147	68
69										137	139	143	146	149	152	69
70										143	144	145	148	151	155	70
71										148*	150	151	152	154	159	71
72											153	155	156	158	163	72
73											157*	160	162	164	167	73
74											160*	164	168	170	171	74

AGE — YEARS		6	7	8	9	10	11	12	13	14	15	16	17	18	19
Av. Ht. (Ins.)	Short	43	45	47	49	51	53	54	56	58	60	62	64	65	65
	Med.	46	48	50	52	54	56	58	60	63	65	67	68	69	69
	Tall	49	51	53	55	57	59	61	64	67	70	72	72	73	73
Av. An. Gain (Lbs.)	Short	3	4	5	5	5	4	8	9	11	14	13	7	3	
	Med.	4	5	6	6	6	7	9	11	15	11	8	4	3	
	Tall	5	7	7	7	7	8	12	16	11	9	7	3	4	

Notes: 1. Age is taken at the nearest birthday; height at the nearest inch; and weight at the nearest pound. A boy is considered 6 years old at any time between 5½ and 6½ years.

2. The following percentage of net weight has been added for clothing (shoes, coats, and sweaters are not included): For weights from 35 to 63 lbs — 3.5 per cent of net weight is added
For weights 64 lbs and over — 4 per cent of net weight is added

3. The figures not starred represent exact averages in round numbers. The starred figures represent smoothed or interpolated values.

Printed by the Iowa Child Welfare Research Station, State University of Iowa, Iowa City, Iowa

[1] Reprinted by permission of World Book Company from "Health Studies." Copyright 1932 by World Book Company

Energy Requirements of Average Man[1]

	Calories per hour
Man sleeping requires	65
Man sitting at rest requires	100
Man at light muscular exercise requires	170
Man at active muscular exercises requires	290
Man at severe muscular exercise requires	450
Man at very severe muscular exercise requires	600

Energy Requirements of Average Woman[2]

	Calories per day
At rest	1600–1800
Sedentary occupations — milliners, bookkeepers, teachers, seamstresses, stenographers, machine operatives	2000–2200
Occupations involving standing, walking or manual labor — cooks in family groups, general housekeepers, chamber maids, waitresses	2200–2500
Occupations developing muscular strength, laundresses, cooks for large groups	2500–3000

Girls and boys in their teens require approximately as many calories as the adult doing manual labor or active muscular exercise.

[1] From Atwater and Benedict, U. S. Department of Agriculture, Yearbook 1904, page 215

[2] From "Feeding the Family," M. S. Rose, The Macmillan Company. Copyright by the Macmillan Company

II. THE WELL-DRESSED GIRL

Reference Chart of Thread and Needle Sizes[1]

Your sewing will be easier and the results more satisfactory when you use threads and needles that are right in size both for the purpose and for the fabric. This convenient guide will aid you in your selection of the correct size of thread and needle to use.

Best Six Cord Black and White Thread Sizes	Needles		Machine Stitches per Inch	Fabric and Purpose
	Hand	Machine		
8 10 12	3 4	Coarsest	8	Heavy weaves of coating, suiting, ticking, sacking, tarpaulin, duck, drilling, canvas. Wash uniforms and bedding supplies for hospitals and hotels. Drapery fastenings.
16 20 24	4 5	Coarse	10 12	Bed ticking, denim, awning materials, porch furniture covers, duck suits. Sewing on buttons and making buttonholes on children's underclothing and men's wash clothing.
30 36 40	5 6	Medium Coarse	12	Heavy cretonne, khaki, madras, muslin. Sewing on buttons and making buttonholes on medium-weight fabrics. Use for quilting or else use quilting thread. For colored fabrics use mercerized sewing or spool silk.
50 60 70	6 7	Medium	14	Percale, cambric, gingham, cotton prints, fabric furnishings, and general household use. Light-weight woolens and firm dress silks. For colored fabrics use mercerized sewing or spool silk.
80 90	8	Medium Fine	16 18	Voiles, lawns, dimities, and all lightweight summertime fabrics. For colored fabrics use mercerized sewing thread or spool silk.
100 120	9	Fine	20 22	Organdy, batiste, chiffon, georgette, and other sheer fabrics. Suitable for making lingerie and infants' clothes. For colored fabrics use mercerized sewing thread or spool silk.
150 200	10	Finest	25	Fine lace, net, and other delicate fabrics. Use for exquisitely fine handwork. For colored fabrics use mercerized sewing thread.

[1] Reprinted through the courtesy of The Spool Cotton Company; taken from "Sewing Secrets," book 53, copyright 1934 (revised edition)

CLOTHING CONSTRUCTION

Before the advent of intelligently planned commercial patterns it was necessary for a student to draft her own pattern and then to obtain from instructor and textbook all the necessary information regarding the construction of the garment. Now a pattern put out by a reputable concern gives pattern layout, as well as construction methods best adapted to the garment which is being made according to the pattern. This has lessened the need for much textbook information in clothing construction. For that reason the authors have chosen only those parts of clothing construction that are fundamental — so fundamental, in fact, that the pattern layout and instruction sheet may neglect to illustrate and explain them.

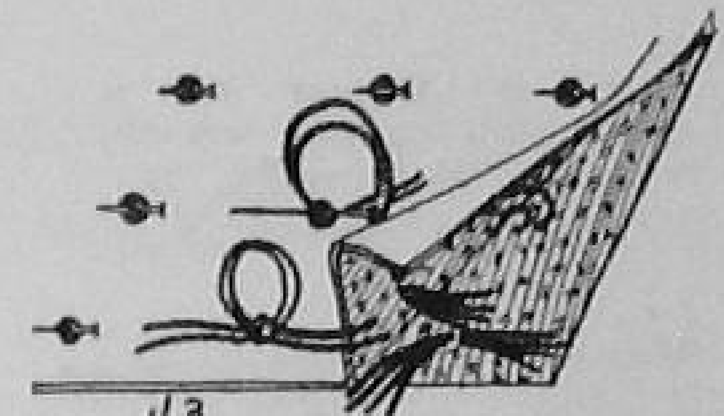
Twenty Reasons for "Home-made" Looking Garments[1]

1. Pattern instructions are not read completely.
2. The pattern pieces are not placed on the fabric and checked with a rule to see if they are on the exact lengthwise, crosswise or bias grain of the material.
3. The garment is not pressed into shape during the making.
4. The perfect pin fitting of the garment is destroyed when it is pressed. When a garment that has been fitted to the curves of the body is pressed on a straight board, the curved portions are shrunk out. These curved portions must be pressed on a curved cushion.
5. Seams are not trimmed in graduated widths and the seam edges, as a result, are bulky. The seams of collars and cuffs should be trimmed at the corners.
6. The imprint of the iron is left on the fabric from overpressing.
7. Stitching is uneven.
8. Garment is overtrimmed.
9. Stitching is too tight.
10. The needle and thread are not changed to suit the fabric. The stitch and tension are not regulated to the thickness of the material.

[1] Reprinted by courtesy of The White Sewing Machine Company. From "White Sewing Course," copyright by The White Sewing Machine Company

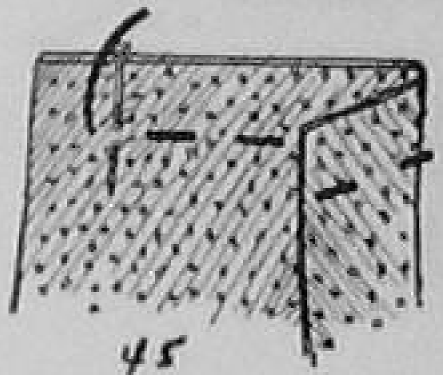
11. Cotton seam binding instead of silk is used on wool and silk fabrics.

12. Seams of bound buttonholes are left inside the bound edges, which gives a raised effect rather than an inlaid appearance.


43

13. Bound buttonholes are made on the straight of the goods instead of the bias.

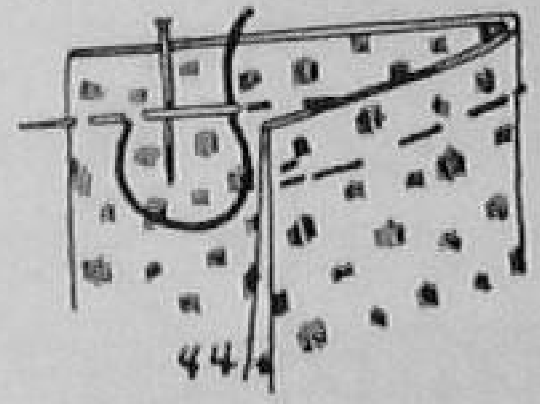
14. Seams are not clipped sufficiently on curves.


45

15. The binding for a neckline is held a bit full and the dress neck is not slightly eased into the bias binding.

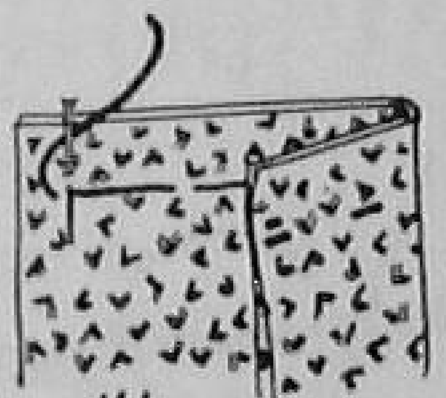
16. Buttons are sewed on a garment too tightly, and usually with no thread shank.

17. Hems are overstitched, very often with the stitches only ⅛ inch apart.

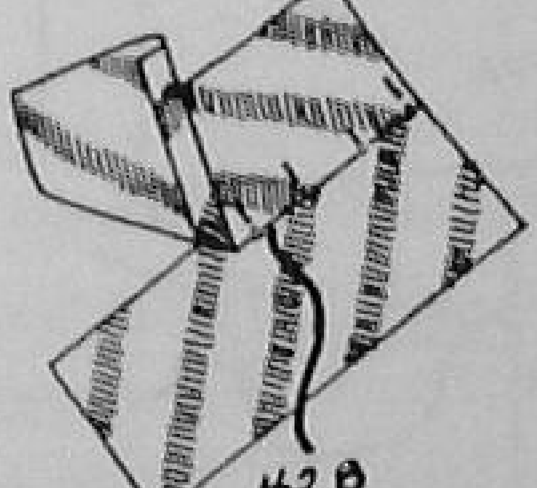

44

18. Wide hems are turned on a circular skirt.

19. Commercial pattern is not individualized to body defects before cutting into the material.

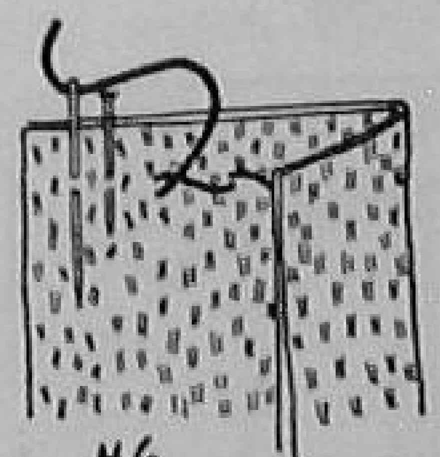

41

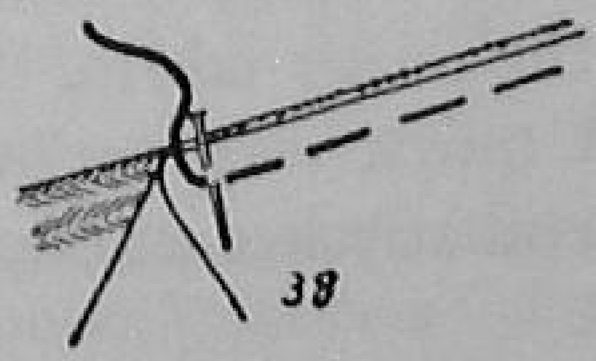
20. Instead of pinning, pressing and machine stitching, the average sewer bastes, machine stitches and presses.


42B

Essential Points about Basting and Marking in the Professional Manner[1]

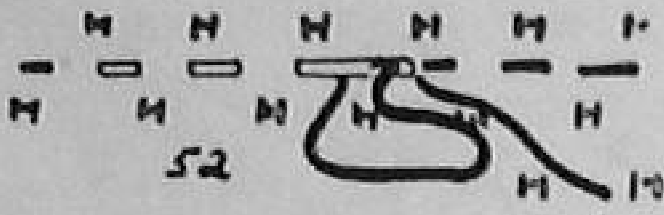
For uniform markings on woollen fabrics, use tailors' tacks (43). Take stitches through both layers of goods, draw into loops, separate the fabric, and snip the threads, leaving one half in each section. Baste seams with even-length stitches when there is any strain (45).


46

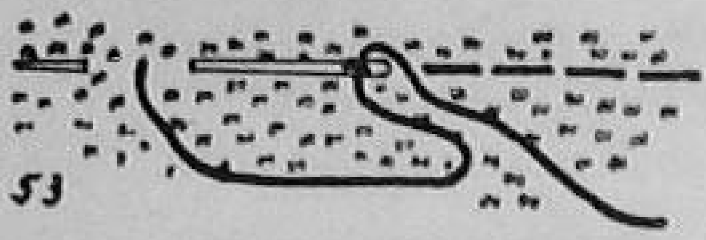

38

[1] Reprinted by courtesy of The Condé Nast Publications, Inc. Taken from "Vogue's Book of Smart Dressmaking." Copyright 1938 by The Condé Nast Publications, Inc.

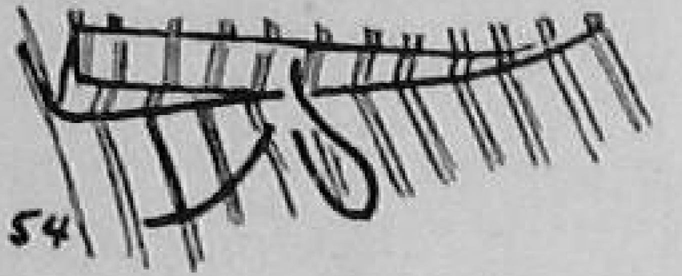
Start with a back-stitch instead of a knot. Follow the seam allowance accurately. Pin at close intervals.



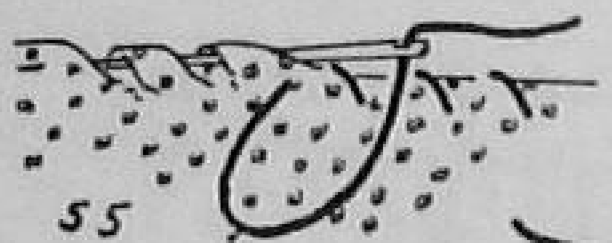
52



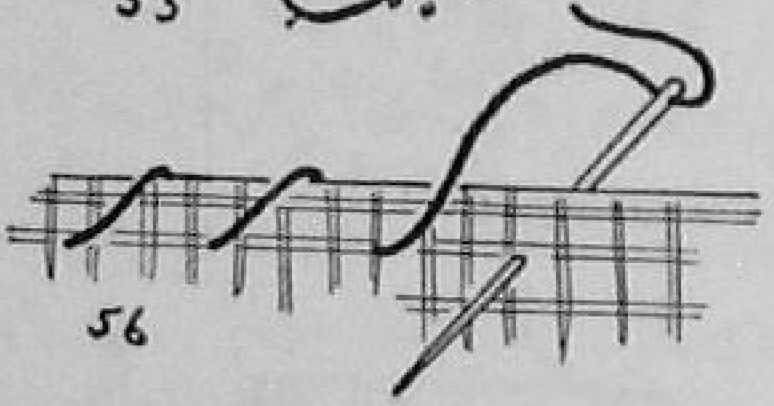
53



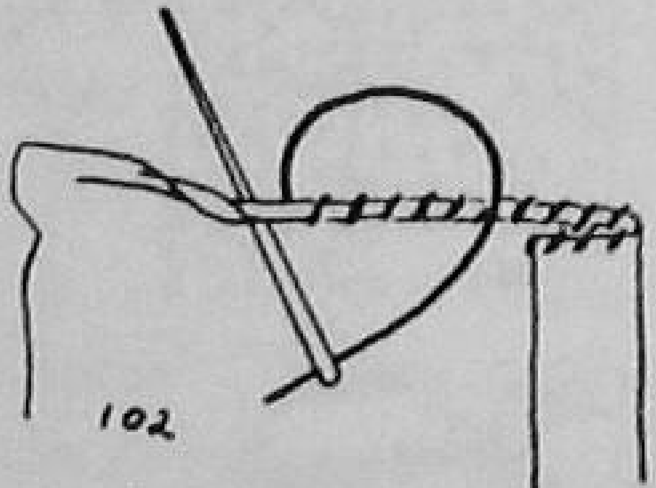
54



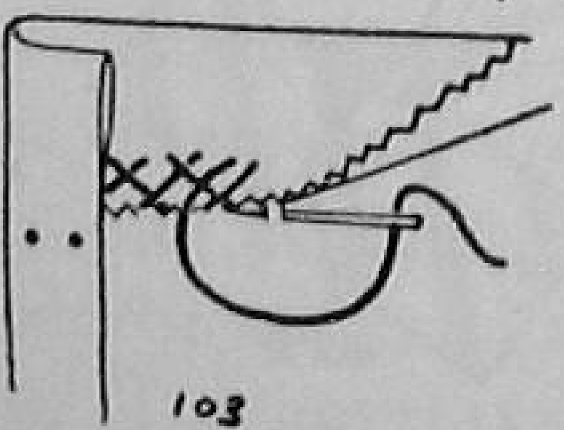
55



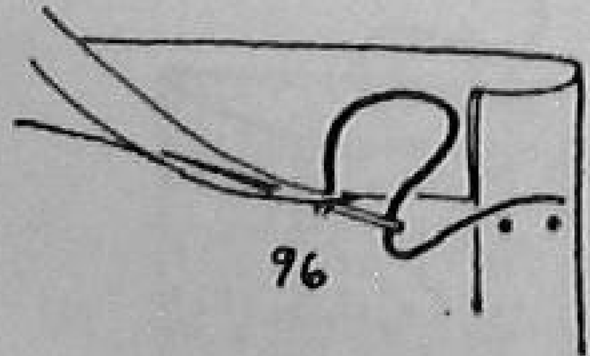
56



102



103



96

Basting may be made more secure with an occasional backstitch (44). Cut, do not pull the stitches when they are ready to be removed.

Where there is no strain on basting, alternate long and short stitches (41).

Slip-basting is the quickest and most accurate method of basting seams when stripes or plaids must be matched (42 B).

Here is a useful temporary stitch (46) that may be used any place where the fabric is likely to slip, as in the facing of a collar.

A bias edge should be basted temporarily to a narrow tape (38), preventing the goods from stretching in the handling. Be careful not to stretch it while it is being sewed.

Important Stitches [1]

Running-stitches should be of uniform size on both sides (52). Take three or four even stitches on needle before pulling thread.

53 shows the first stitch in back-stitching. After the needle is drawn through, it is carried back and put in the goods where the thread has gone in the fabric.

54 shows a useful stitch when matching plaids, stripes, etc. Keep the right side up, then take a few running-stitches through the creased upper fabric, and, finally, pick up a few of the threads on the under fabric.

A quick way to overcast on a pliable fabric (55) is to take several stitches at once, before pulling the needle through. Over-

[1] *Ibid.* page 607

casting (56) may be done from left to right, or right to left, over both edges of a closed seam, or on each edge of a seam that has been pressed flat open.

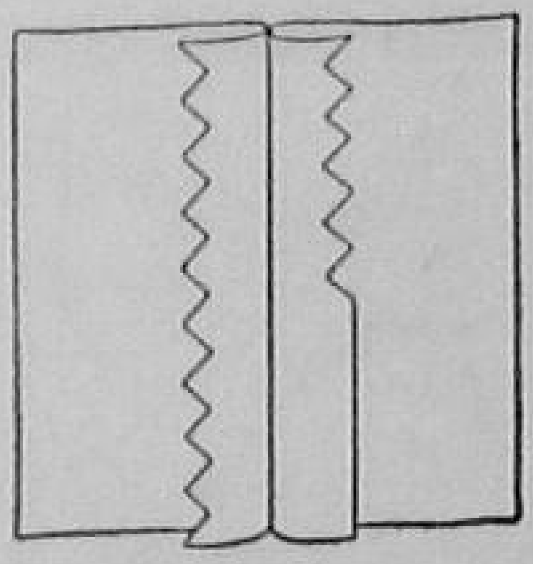
Fine workmanship shows in rolling and whipping the edges of all sheer fabrics (see 102). Work from either side or in either direction. Keep the stitches even.

Catch-stitch (103) may finish an edge or hold a hem. Work in either direction, but keep an even slant.

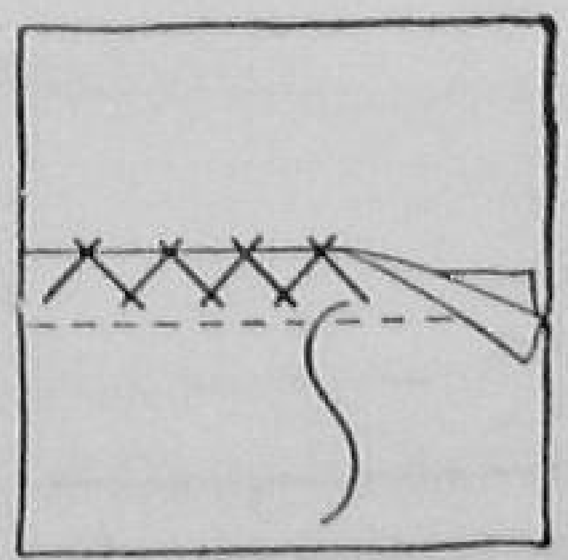
In the making of a slip-stitched hem the needle is inside the turned edge (96).

Seams[1]

A seam is the joining of any two edges. The simplest seam is made by laying the edges together with the right sides of the fabric touching, and sewing, by machine or by hand, in line with the edge and at an equal distance from it.

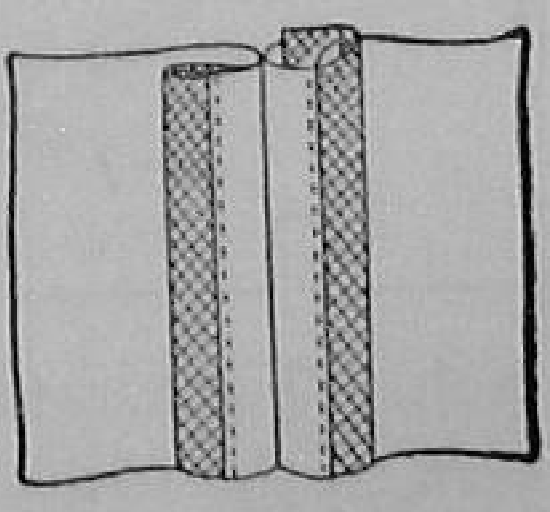


In a closely woven material that does not fray easily, the edges are often pinked and pressed open, or both may be pressed in the same direction. For pinking, use ordinary scissors or special pinking shears or the pinking attachment obtainable for the sewing machine.



If fabric ravels easily, seam edges must be finished so that they will not fray out. Seam edges may be overcast separately and pressed apart, or overcast together and pressed to one side.

In heavy materials the catch-stitched seam is sometimes used. Press the seam open and catch-stitch each side separately. Or cut one edge to half its width and press the other over it, as illustrated.

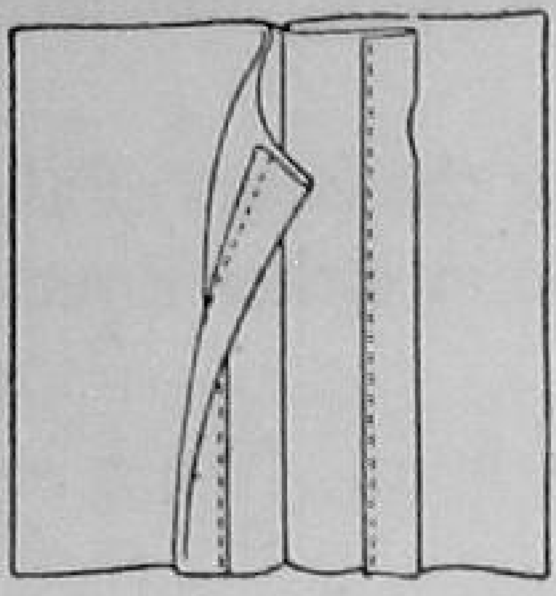


Seams may be bound with bias strips bought ready to use or cut from the fabric of the garment or from lining material.

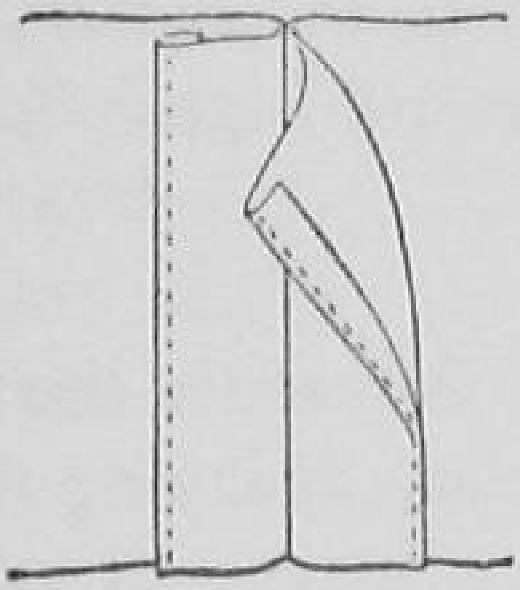
To apply binding with a machine binder, follow the directions given in the machine in-

[1] Reprinted by courtesy of The Butterick Publishing Company. Taken from "Making Smart Clothes." Copyright 1934 by The Butterick Publishing Company

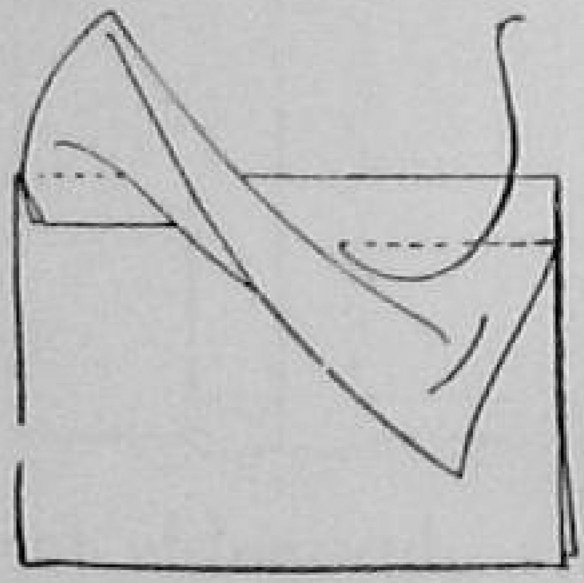
struction book. For binding without the attachment, cut the strips an inch wide or less. Stitch one edge to the seam edge. Fold the other flat over, and stitch just inside the first stitching. Bias-fold seam binding may be folded lengthwise over the seam edge and secured with one row of stitching.



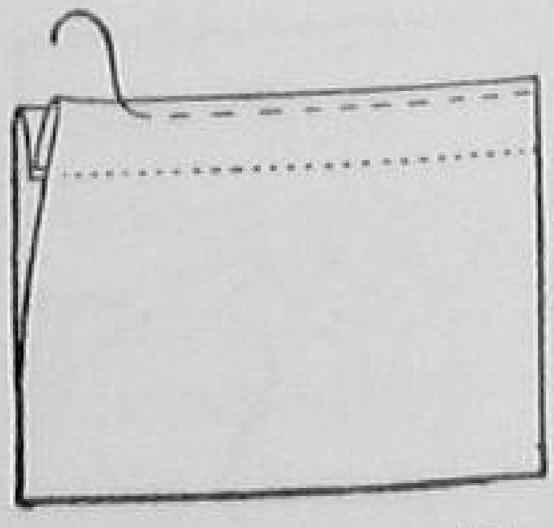
Straight or nearly straight seams may be bound with ribbon seam binding. Fold the binding lengthwise with one side a trifle narrower than the other, and press. Slip over the edge of the seam, and sew through both edges with one operation.



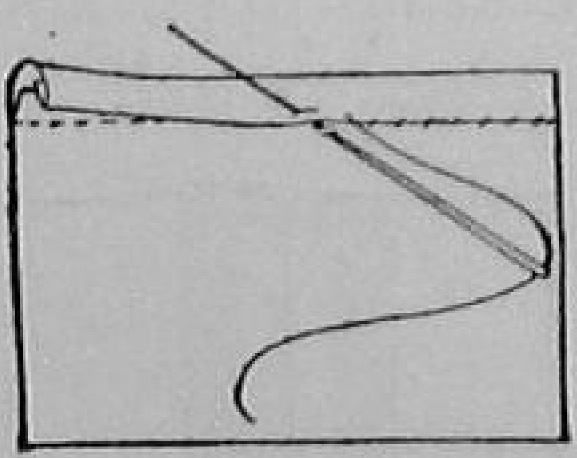
In material that is not bulky, the seam may be pressed open, and the edges turned under and stitched close to the edge.



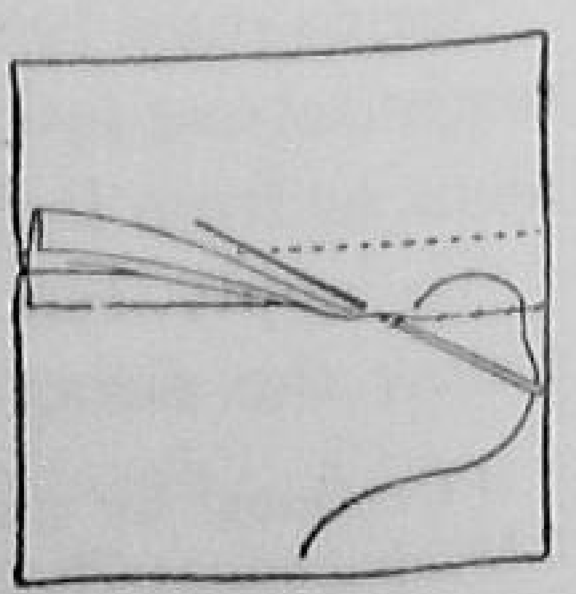
For a French seam, baste the edges together with the wrong sides meeting, so that the seam is on the right side of the garment. Sew a scant quarter inch outside the basting line. Trim off the edges to one-eighth inch and remove the bastings. Turn the garment wrong side out and stitch again, making sure that the raw edges are encased.



When a seam has been basted on the wrong side in a place where a French seam is needed, or on irregular edges where it is difficult to make the usual French seam, use a turned-in or a felled French seam. For either of these, sew a plain seam on the inside of the garment. For the turned-in seam, fold the edges in toward each other and hold together with machine stitching or running or overhanding.

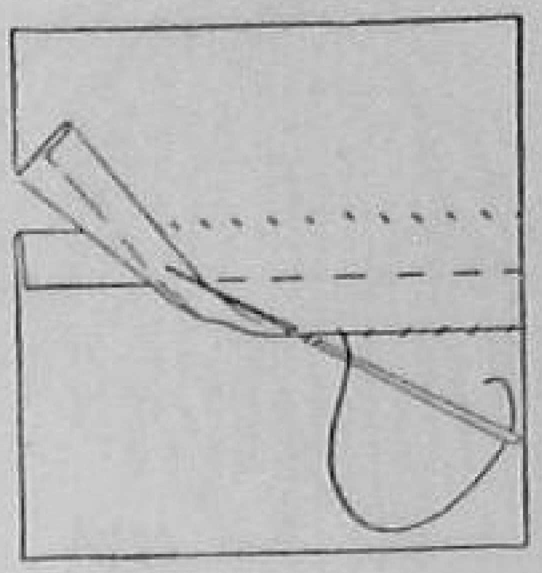


For the felled French seam, cut one edge to one-eighth inch. Turn in the other edge, fold it down, and hem to the row of stitching.

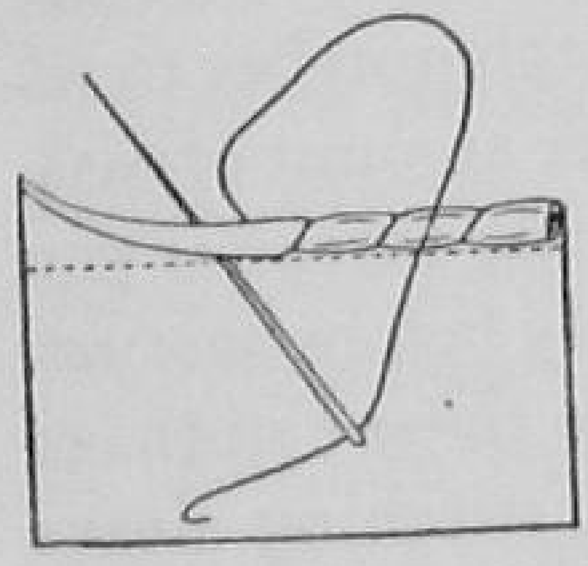


Stitch a plain seam and cut one edge to one-eighth inch. Turn in the other edge and baste

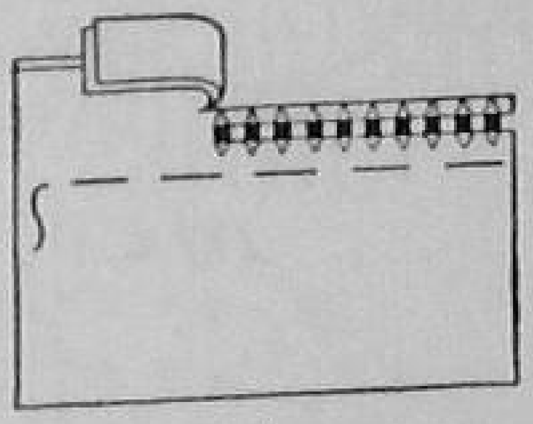
it flat to the fabric, covering the narrow edge. Stitch by machine or hem down. This is known as a flat fell.



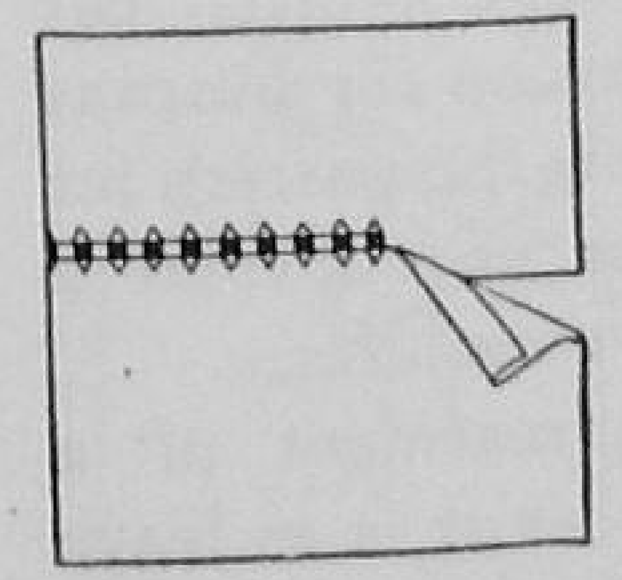
For a lapped fell, place one edge over the other, with the edges facing in opposite directions, and baste along the seam line. Turn in each edge and stitch or hem flat. When both sides of a lapped fell are finished in the same manner — that is, both by hand or both by machine — the seam is the same on the outside and inside of the garment.



In very sheer fabrics the rolled seam may be used. Stitch or baste the edges together and cut to one-fourth inch. Begin at either end and roll the joined edges tightly between the thumb and forefinger of the left hand, whipping the roll with stitches that pass around, not through it.



Machine hemstitching makes secure and almost invisible seams on soft thin materials. Baste a seam on the wrong side of the garment, and have the machine hemstitching done beside the basting. Cut the fabric off just outside the hemstitching. Or turn under one edge of the seam, and baste the fold flat to the right side of the other edge, using thread of the same color as the fabric. Have it hemstitched, from the right side, directly over the folded edge.

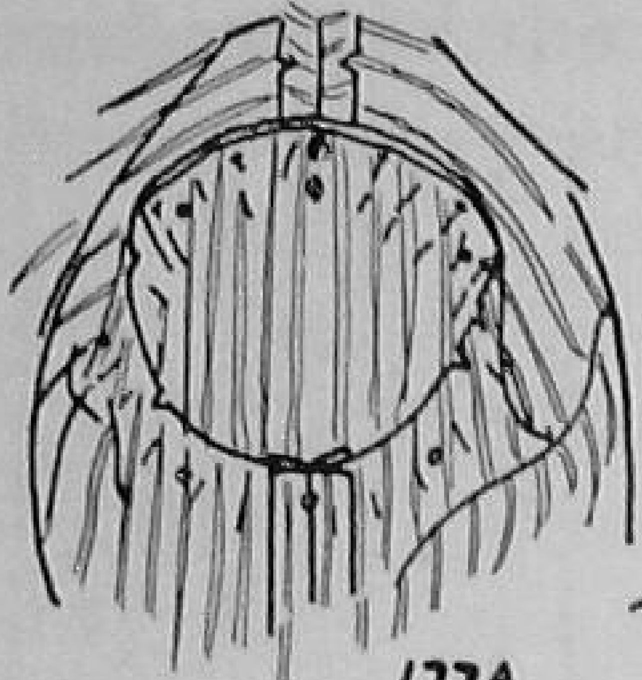


For an edge-stitched seam, turn in one edge and baste it flat on the right side of the other edge. Stitch close to the edge of the fold. This method is possible on curved and pointed seams where other methods cannot be used. When seams are much curved, snip the edges on inner curves and cut out little notches on outer curves to prevent drawing or bulkiness.

Stitch an eighth of an inch or more from the edge, and you have a welt seam.

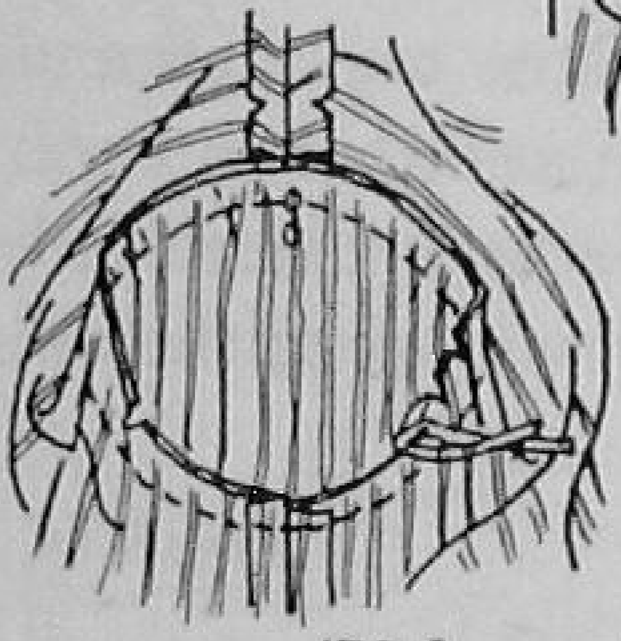
For a slot seam, turn in both edges and baste them, fold to fold, on a strip of fabric. Stitch a welt seam on each side.

Seemingly, Curly Locks' suitor was ignorant. All he promised her, you remember, was a chance to sew "*a* fine seam."

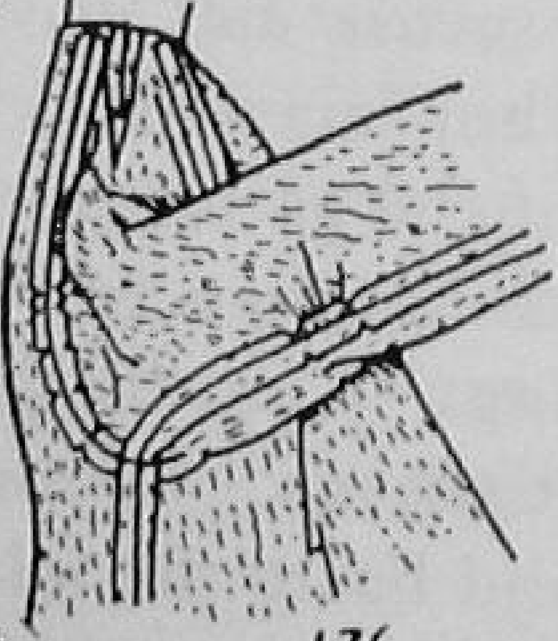


177A

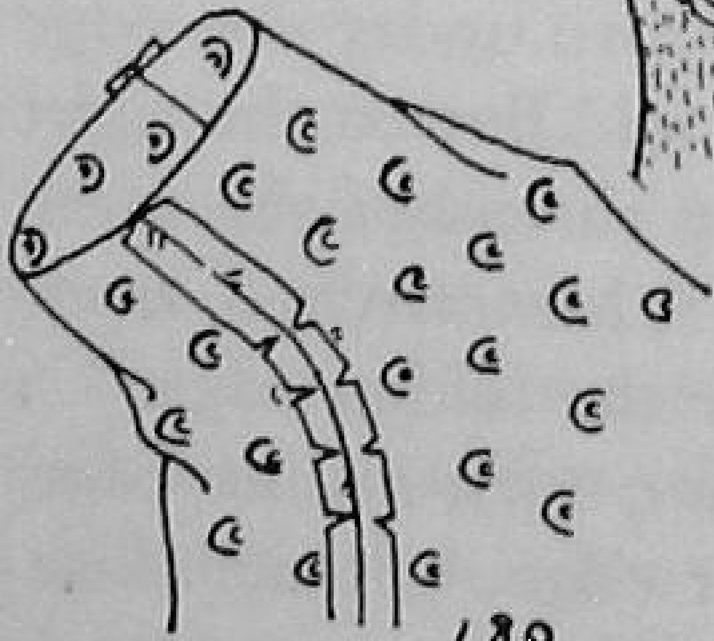
177B



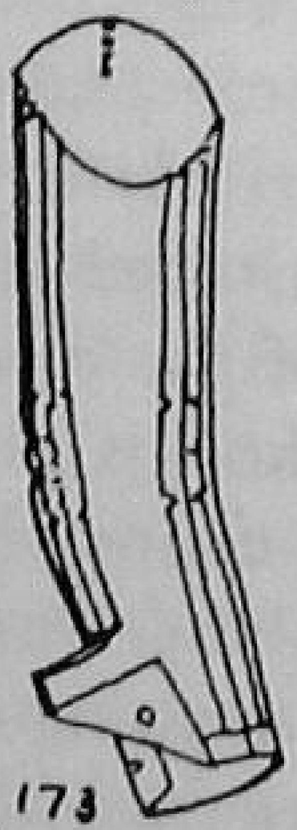
177C



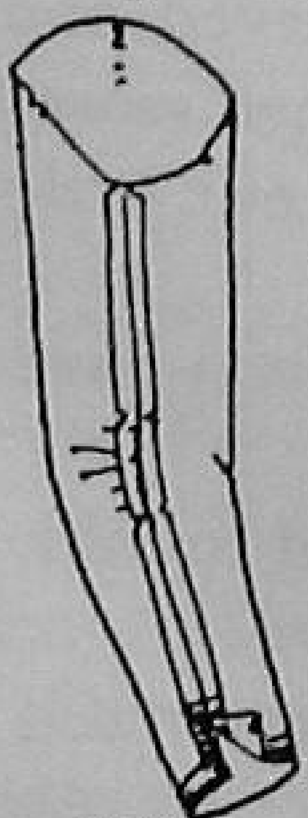
176



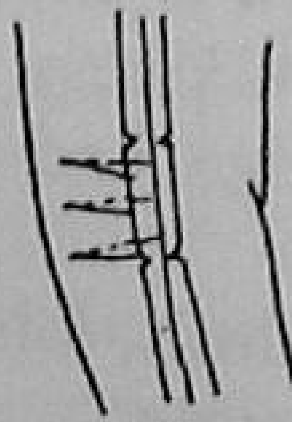
180



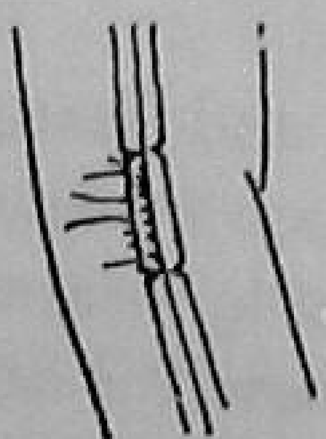
173



174



175A



175B

Explaining the Setting-in of a Sleeve [1]

Match Notches Carefully. To make a success of setting in a sleeve, hold it toward you while working. Keep marks from double perforations on pattern in line with shoulder seam and match notches to retain the proper amount of ease. Run a gathering thread if you like. Pin freely before basting. Trim seams to three eighths of an inch after stitching sleeve (177 A to C). Press over a tailors' cushion.

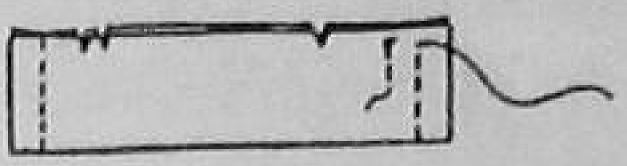
A raglan sleeve and a kimono sleeve seam should be clipped (176 and 180). A two-piece coat sleeve is often cut with an extension for buttons (173). Follow the pattern for the exactness of cut that a tailored sleeve requires.

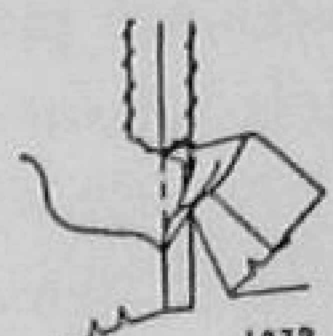
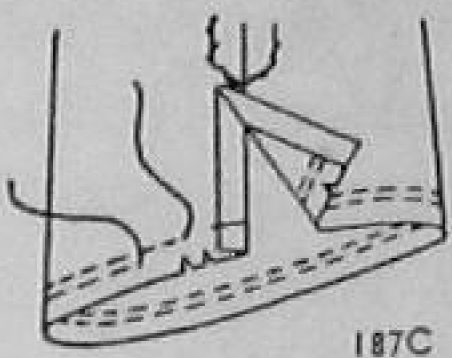
A classic treatment of a sleeve at the wrist is to leave the seam open a few inches and finish with a facing and snap fasteners (174). Follow the pattern chart for individual treatment.

One-seam sleeves require ease at the elbow. The pattern may

[1] Reprinted by courtesy of The Condé Nast Publications, Inc. Taken from "Vogue's Book of Smart Dressmaking." Copyright 1938 by The Condé Nast Publications, Inc.

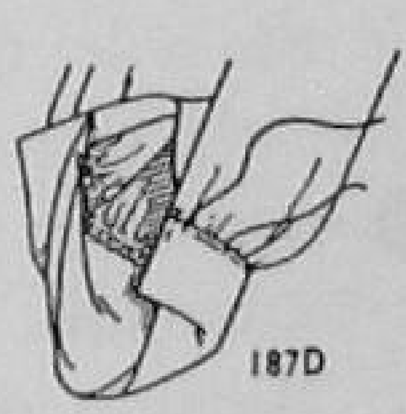
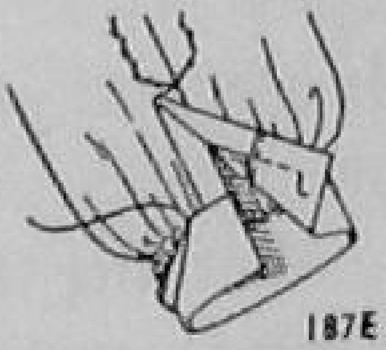
call for fullness laid in darts (175 A) or for ease between notches (175 B). Hold the side that is to be eased toward you while basting and do not neglect to match the notches accurately.

187A


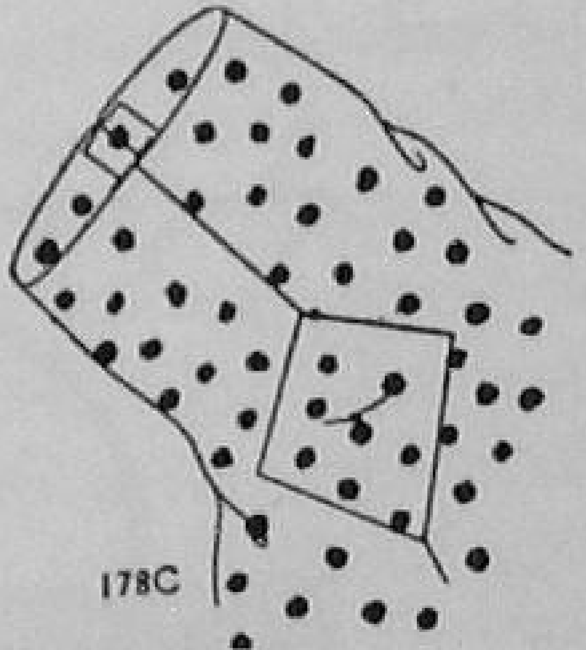
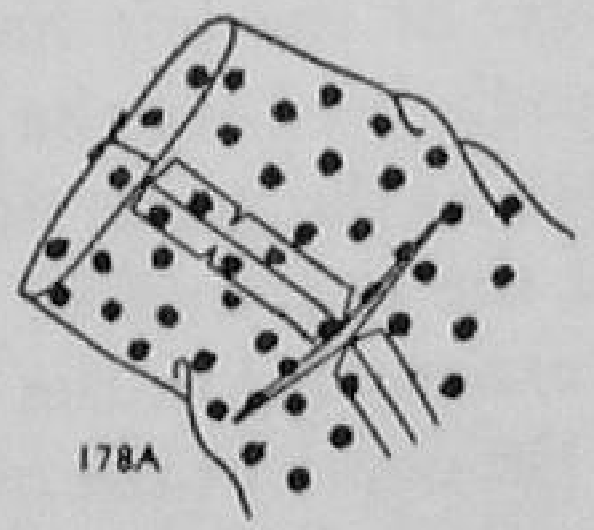
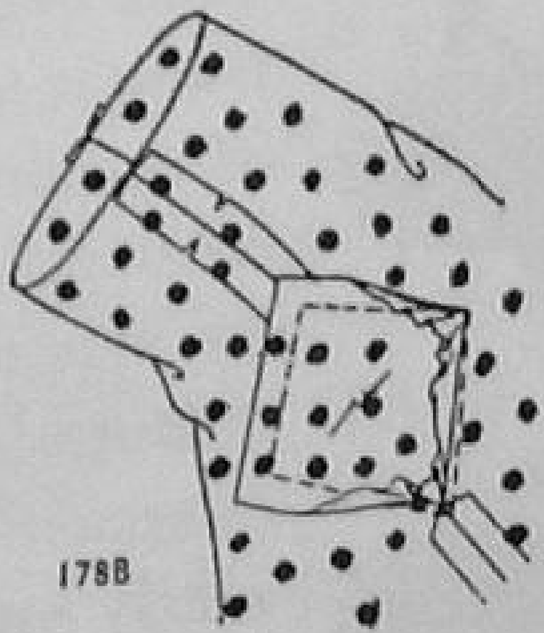
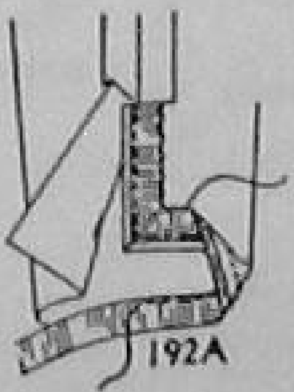
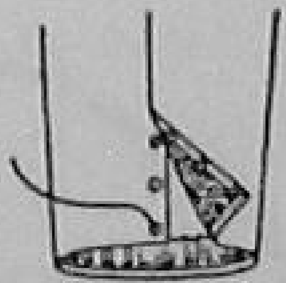

187B

187C

Points on Various Types of Sleeves with Effective Finishings[1]

Steps in finishing a sleeve with a slashed opening and a turned-back cuff are shown in 187 A to E.


187D

187E

A kimono sleeve may require a gusset joined to slashes under the arm (178 A to C). Ribbon seam binding may finish the opening of a sleeve at the wrist (192 A and B). It should be carefully matched in color, and the snap fasteners should be small in size.


178C

178A

178B

192A

192B

Buttonholes[2]

There are several steps to be followed in making a buttonhole, as follows:

[1] Reprinted by courtesy of The Condé Nast Publications, Inc. Taken from "Vogue's Book of Smart Dressmaking." Copyright 1938 by The Condé Nast Publications, Inc.

[2] Reprinted by courtesy of The McCall Corporation. Taken from "Dressmaking Made Easy" (revised edition). Copyright 1939 by The McCall Corporation

Marking. The location and size and the distance from the edge should be marked with a line of basting.

A buttonhole should be cut one sixteenth of an inch longer than the diameter of the button, and exactly on the grain of the material.

When buttonholes are placed at right angles to the edge of the garment, buttonhole scissors may be used to cut them, first setting the gauge so that the cut will not be too long.

When buttonhole scissors are not at hand, buttonhole may be marked by pushing the point of a large pin through the cloth where the ends will come; then by inserting the point of a very sharp scissors in the hole, the cut may be made to the other hole. If buttonholes are placed parallel to the edge of the garment, they should be cut in this latter way.

Working the Buttonhole. Work from right to left.

Overcasting. Because of the two thicknesses of cloth, the edges of the buttonholes must be overcasted to hold the edges together, and prevent fraying while working them.

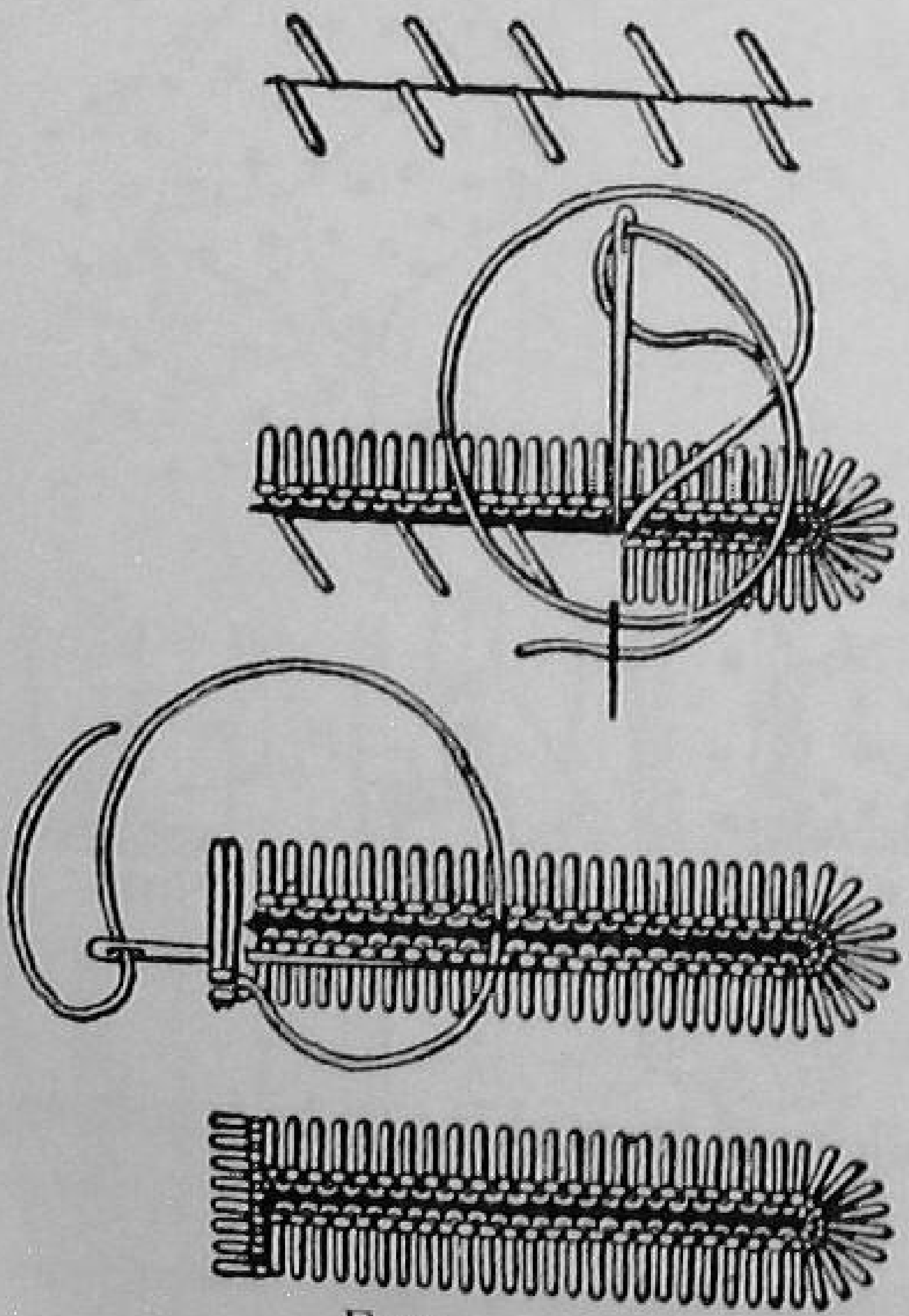


FIGURE 1

Hold the slit diagonally across the first finger of the left hand; insert the needle between the two layers of cloth at the inside right-hand end of the buttonhole, and bring it out exactly below the end of the slit; the depth of the overcasting depends on the kind of buttonhole and the sort of material.

Buttonhole Stitch. The last overcasting stitch should be directly opposite the first (three to five to a buttonhole), which will bring the thread into position for the first buttonhole stitch at the inner end of the slit (supposing the buttonhole to be at right angles to the edge of the garment). Draw the needle through the slit and bring it up through the cloth beside the last stitch; then pass the double end of the thread around the

point of the needle, from right to left; then draw the needle through the cloth, straight up from the edge; this places the stitch properly with the "purl" or twist right on the raw edge of cloth; be careful not to draw thread tight. Repeat the buttonhole stitch until the end of the slit is reached.

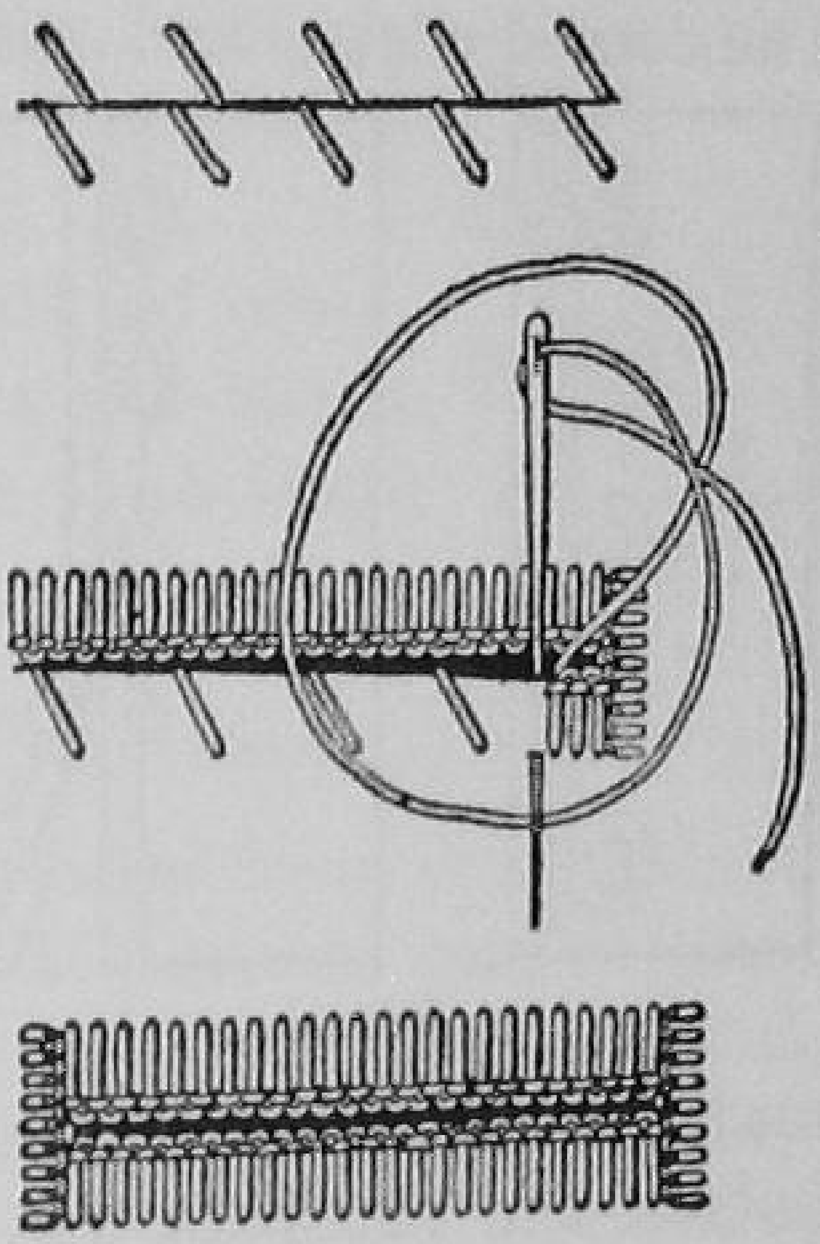


FIGURE 2

Fan. The outer end of the buttonhole may be finished by from five to seven buttonhole stitches around the end to make the turn in a fan shape; continue the buttonhole stitch along the other side of the slit, to the inner end, which may be finished with a bar (Figure 1).

Bar. Draw the needle through as though to make another buttonhole stitch, without passing the thread around the point of the needle; put it through the cloth at the end of the buttonhole stitch on the opposite side and lay two or three stitches in this way across the end of the buttonhole. Then turn the cloth around, so the end of the buttonhole lies across the finger; work tiny blanket stitches over these long stitches; the twist or purl of the blanket stitch should be toward the end of the buttonhole and each stitch caught into the cloth. Place blanket stitches close enough to cover the bar. If there is occasion to piece the thread, run the old thread back under the stitches on the wrong side, and the new thread forward under the same and the needle up through the purl of the last buttonhole stitch. This will give a complete edge to the buttonhole (Figure 2).

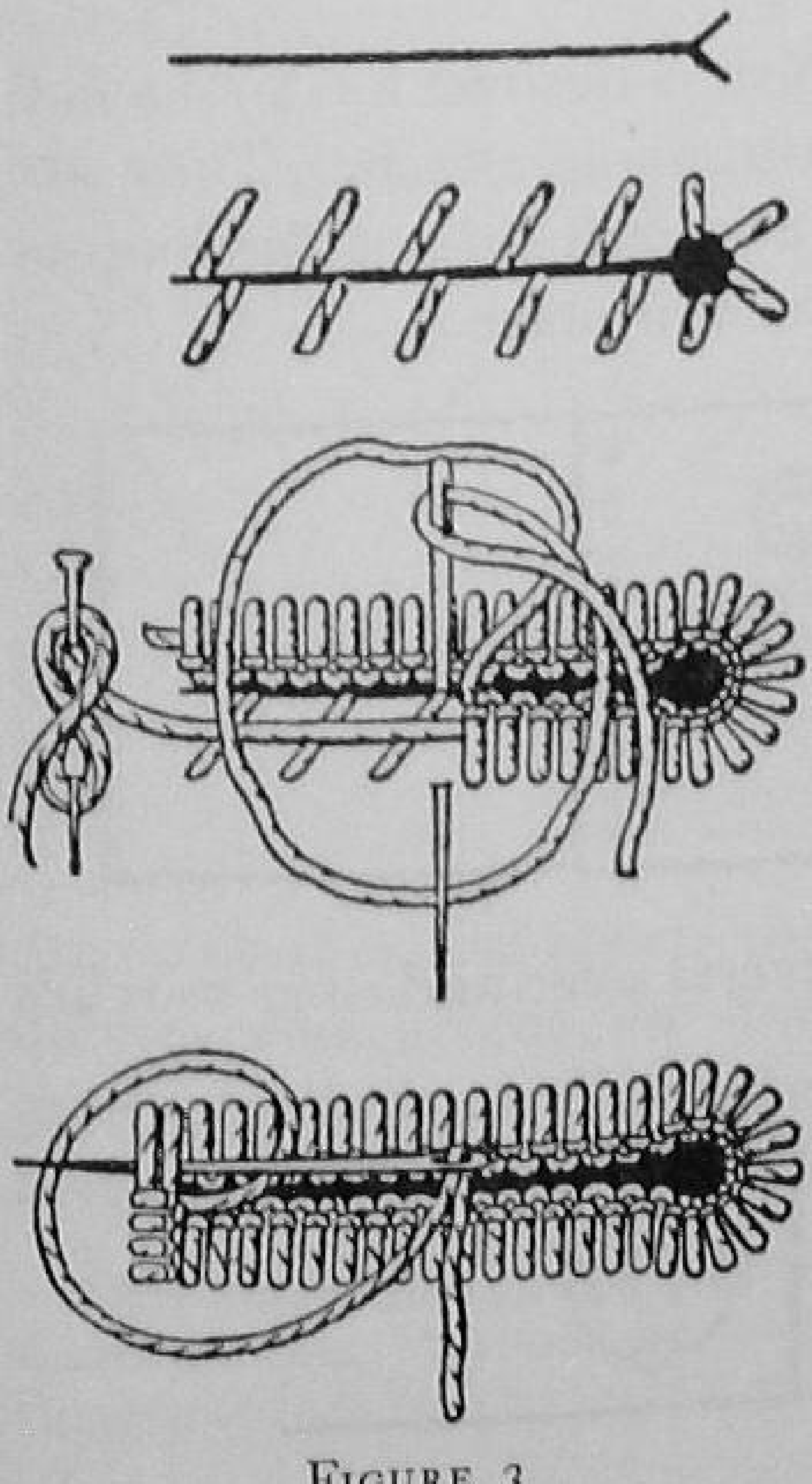


FIGURE 3

Tailored Buttonhole. Hold cord along edge, using heavy twist. The corded edge gives longer wear for coats (Figure 3).

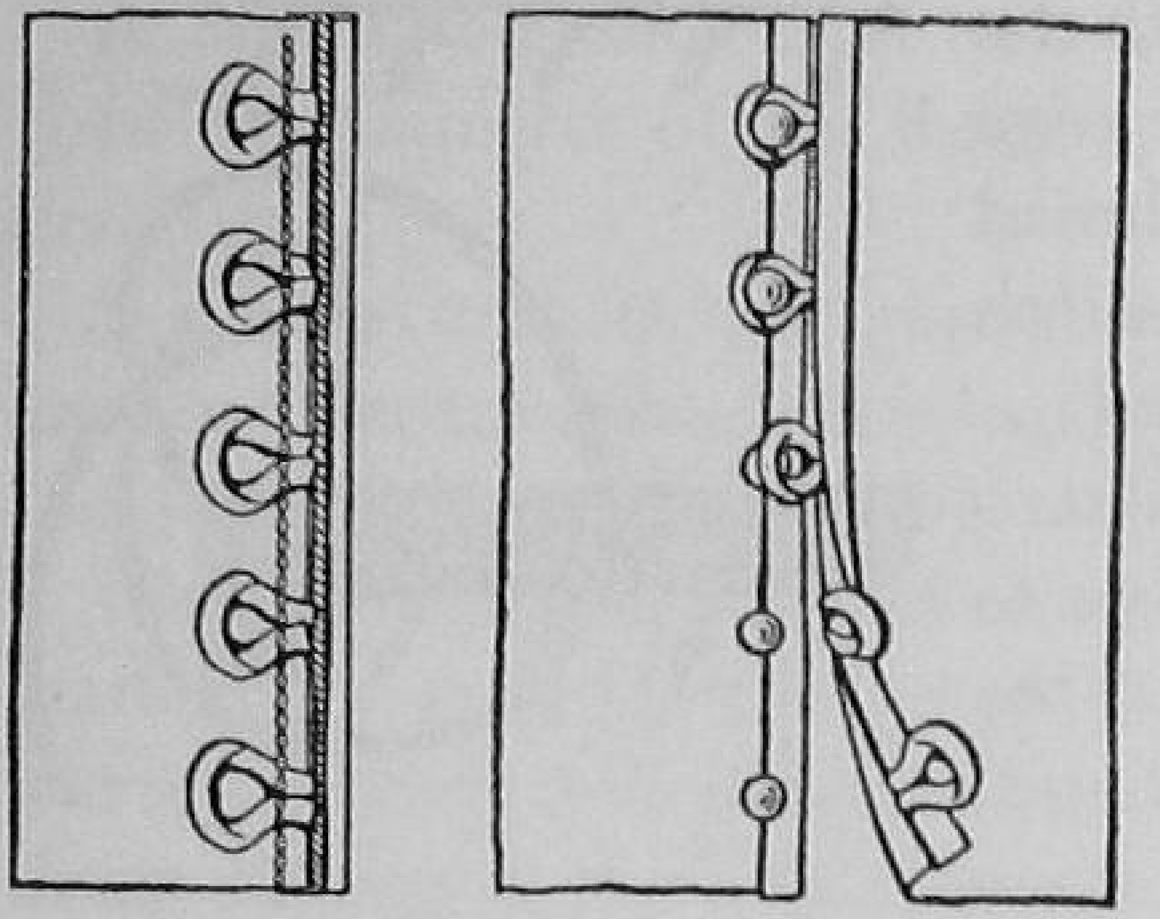
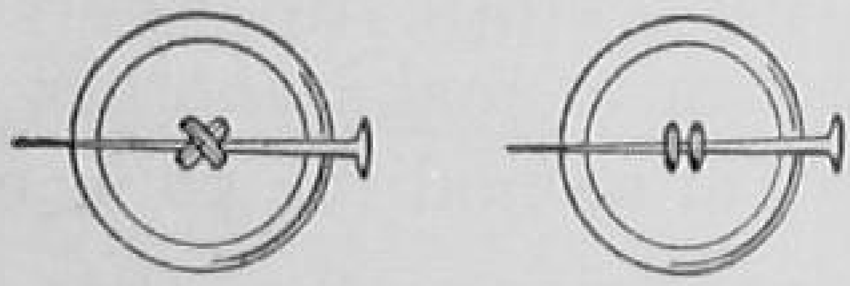


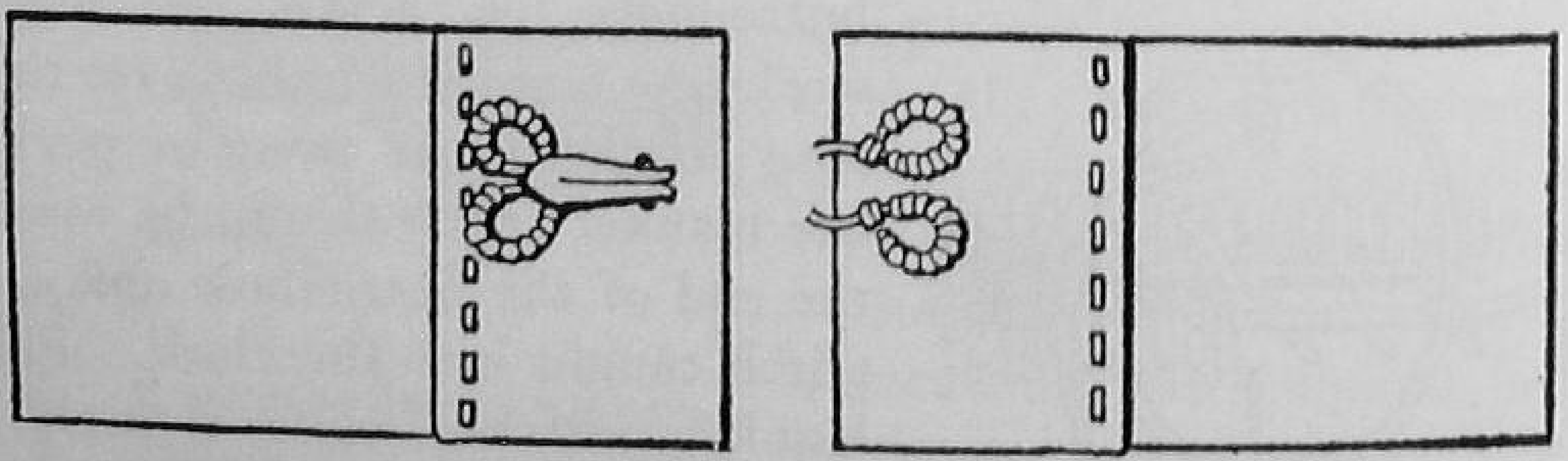
FIGURE 4

Bias Loops are used for an even closing, particularly for neck openings, vestees of soft fabrics, and sleeve openings. Make a bias fold and press flat. Baste in loops to fit buttons on a turned edge, stitch down, and bring fold over the rough edges. Hem flat and press (Figure 4).

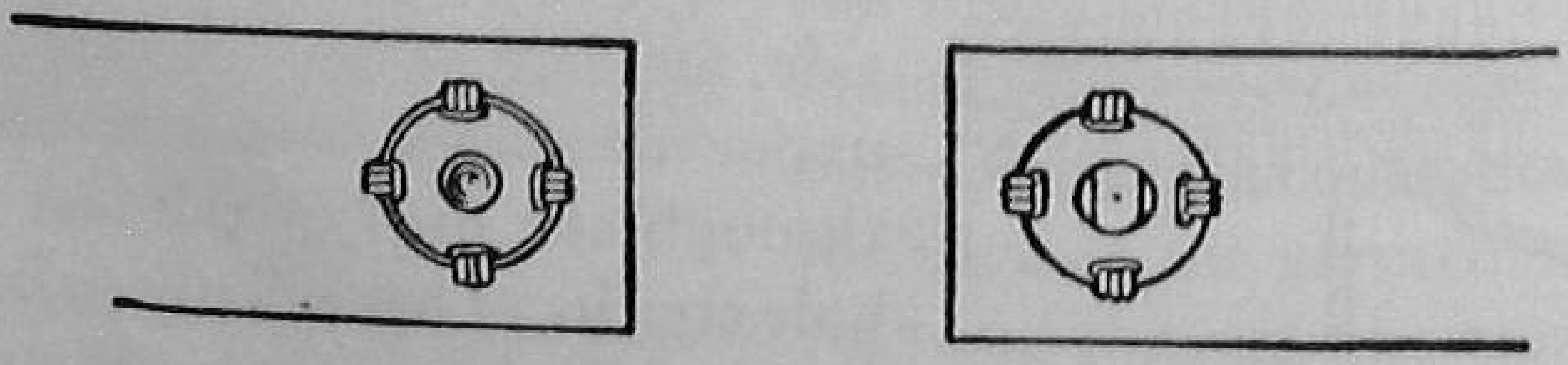
Buttons. The knot of the thread, which should be double, may be hidden under the button. Place a pin on top of the button and sew back and forth across it. The pin keeps the thread loose enough to form a neck by winding the thread around it, which lets the buttonhole slip over the button easily.



Hooks and Eyes. If a very neat finish is desired for hooks and eyes, they may be fastened with a buttonhole stitch. They are just as strong if sewed at the end. Tack each side of the loop of the eye and across the hook to keep them in place.



Snap Fasteners are sewed on with several over-and-over stitches in each hole in the fastener.



Tapes are fastened to garments by turning in one end of the tape, stitching across the tape one-quarter inch from the end and hemming all around the end.

Cord Loops are suitable for tailored garments. The cord is sewn on a turned edge and a facing of the cloth stitched flat for a neat finish (Figure 5).

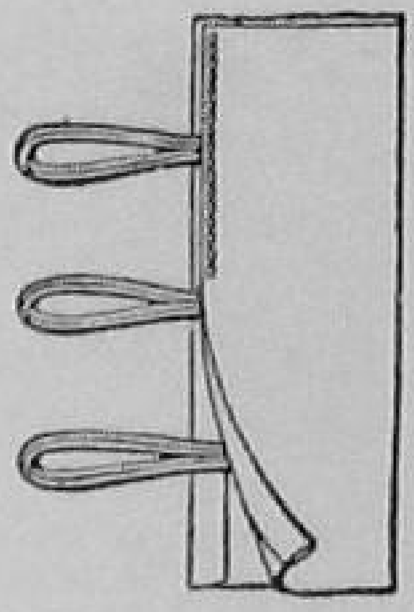
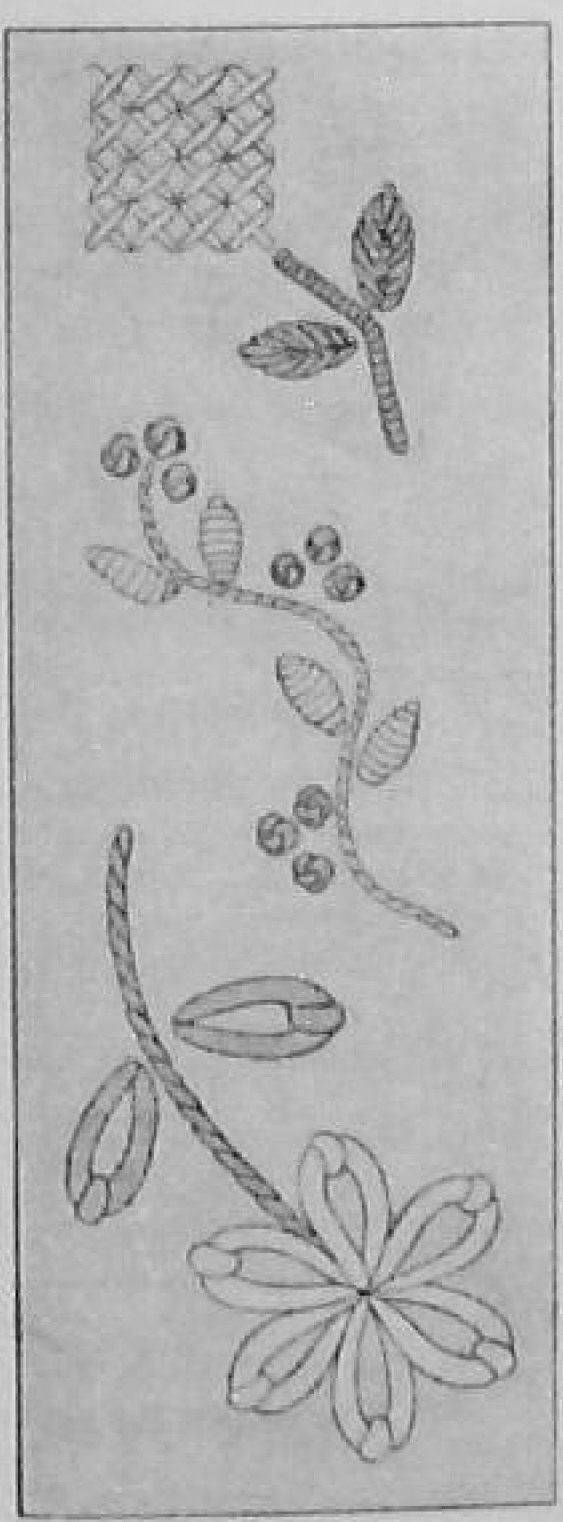
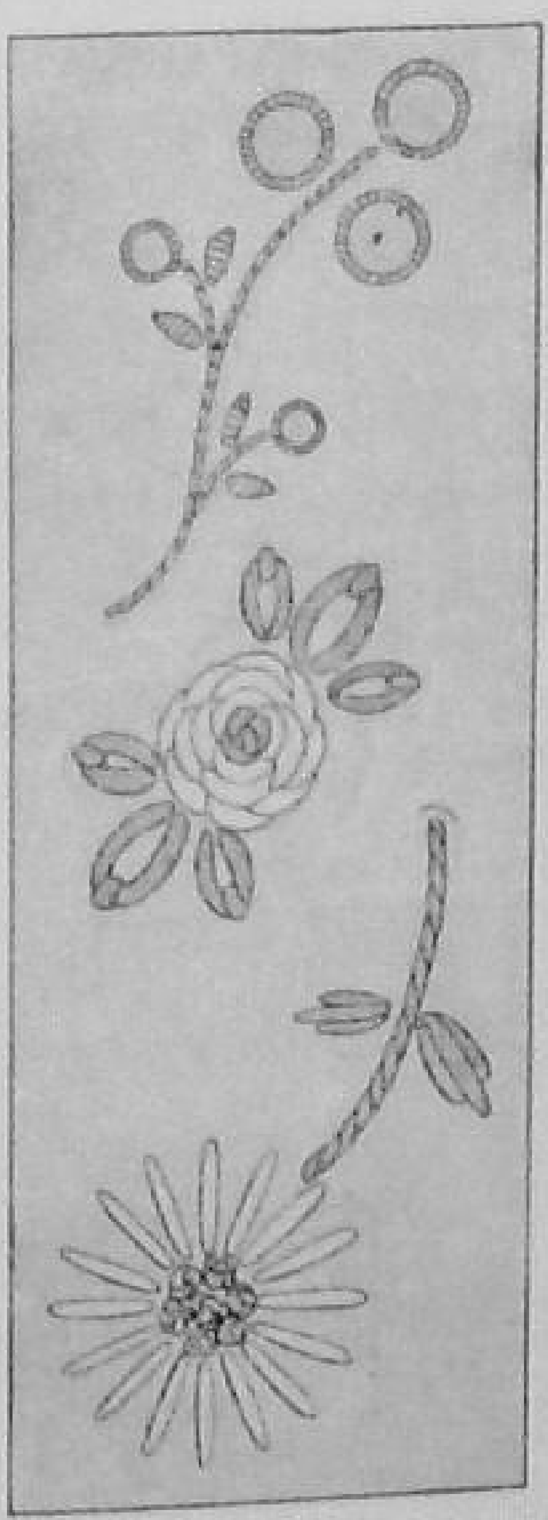


FIGURE 5

STITCHES COMBINED TO MAKE EMBROIDERY DESIGNS [1]

Learn to combine embroidery stitches without being entirely dependent upon stamping patterns. A square of cross stitches, a crooked stem and leaves, makes a flower to decorate a dress or blouse. Outline a curve, place groups of French knots or eyelets and leaves along it, and you have a dainty trimming for underwear. Single flowers, sprays, and bouquets decorate children's clothes or household linens.



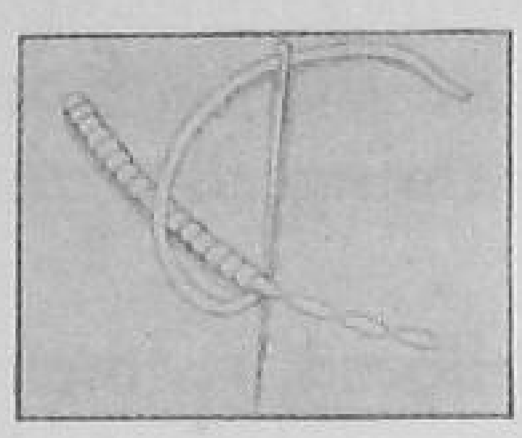


Have embroidery threads on hand, ready for this work. Use six-strand embroidery thread for fine work and pearl cotton thread for bolder embroidery effects. Try red and royal blue on white for children's clothes and sports things. Experiment with lavender, turquoise, and greens on flesh pink; and try effects of orange, greens, yellows, and browns. Give embroidery designs character and original touches.

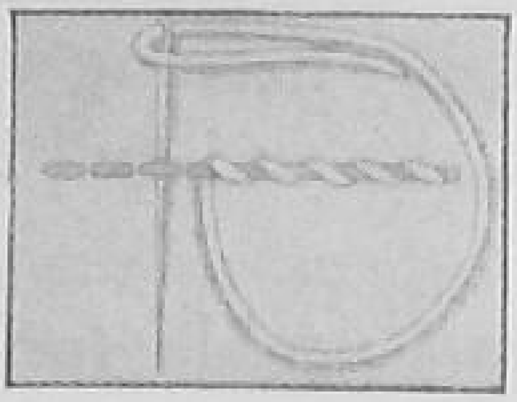
[1] Reprinted through courtesy of The Makers of Clark's O.N.T. and J. & P. Coats Threads. Material taken from booklet "Sewing Secrets" (revised edition). Copyright 1934 by The Spool Cotton Company

Simple Embroidery Stitches

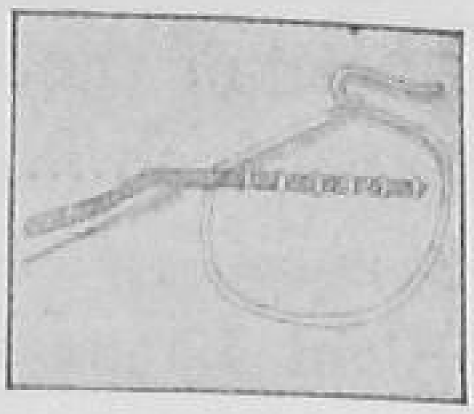
1. Outline Stitch.



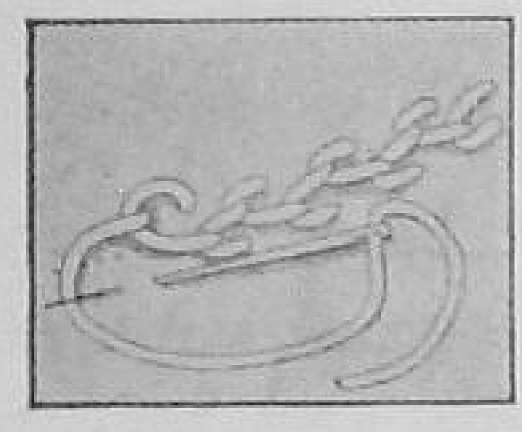
2. Stem Stitch.



3. Twisted Running Stitch.

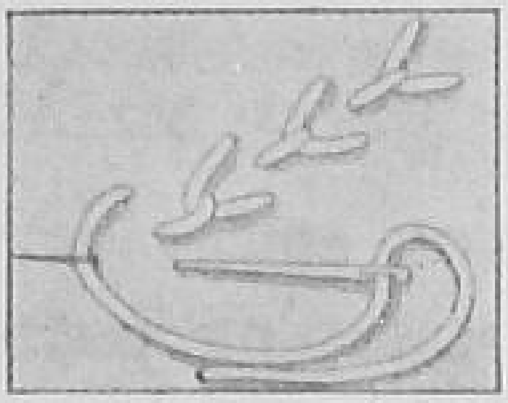


4. Couching Stitch.

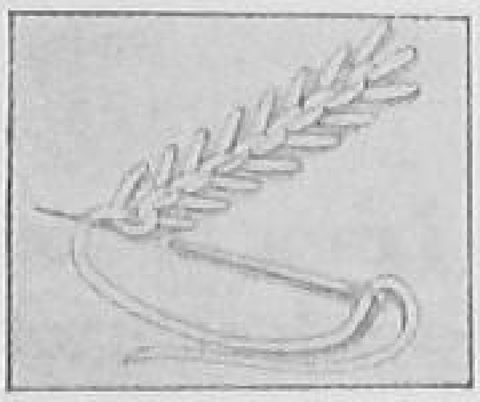


5. Single Feather Stitch.

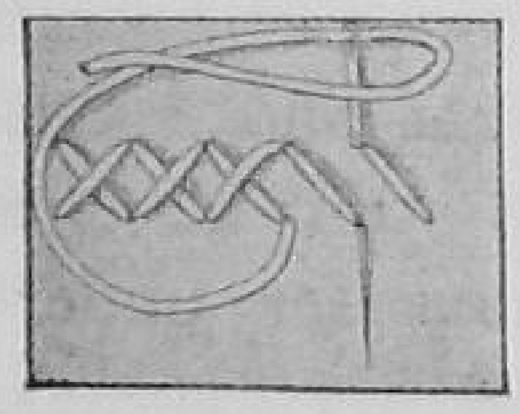
6. Catch Stitch.



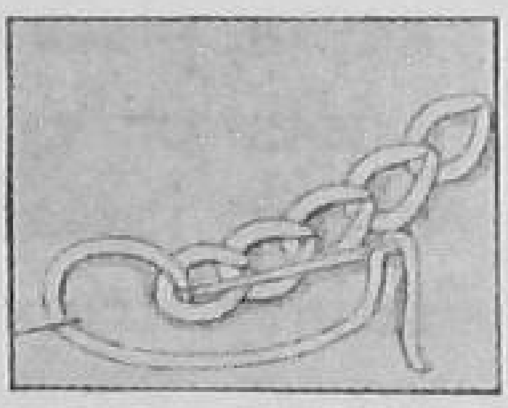
7. Y Stitch.



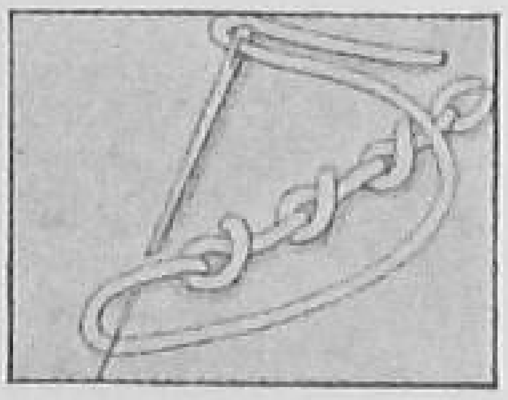
8. Fishbone Stitch.



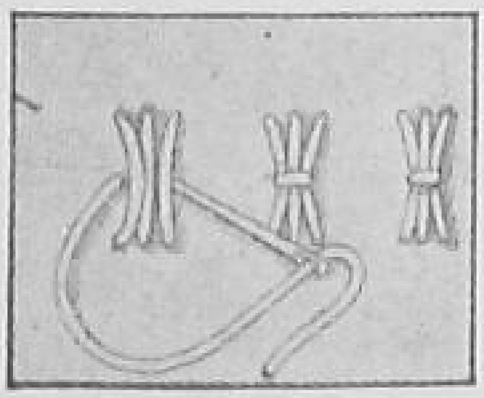
9. Cross Stitch.



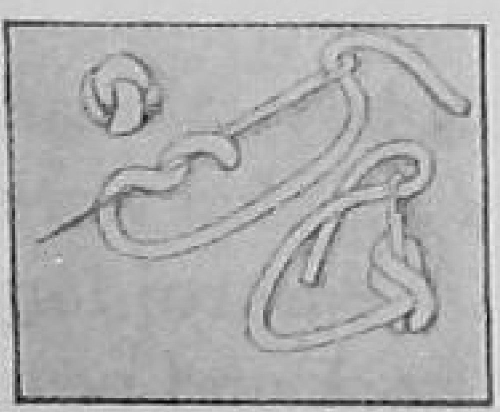
10. Chain Stitch.



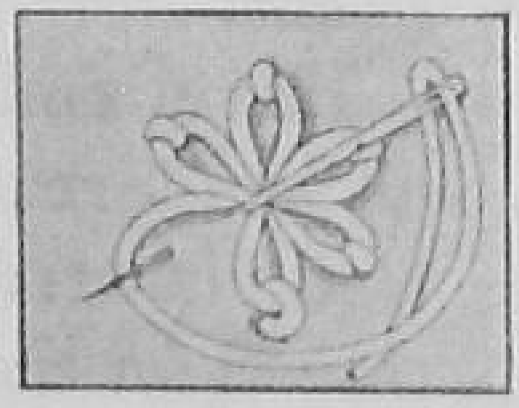
11. Twisted Chain Stitch.



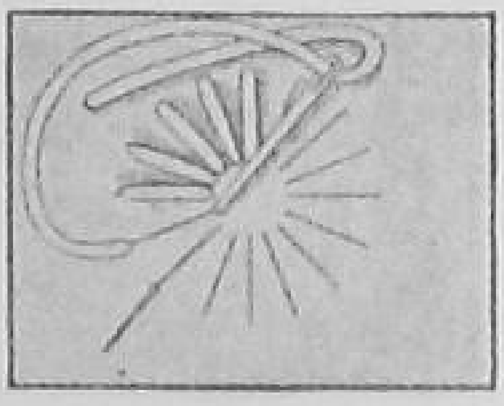
12. Bundles.



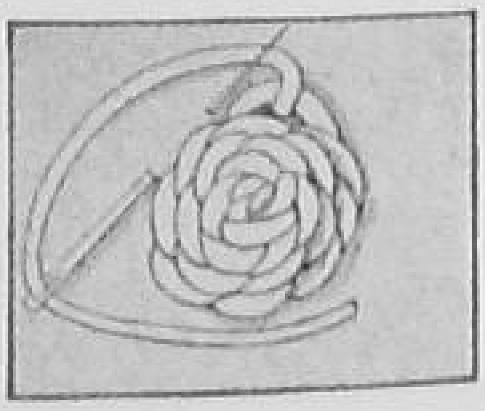
13. French Knot.



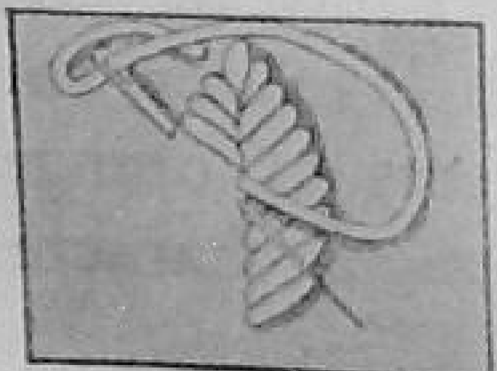
14. Loop or Lazy Daisy Stitch.



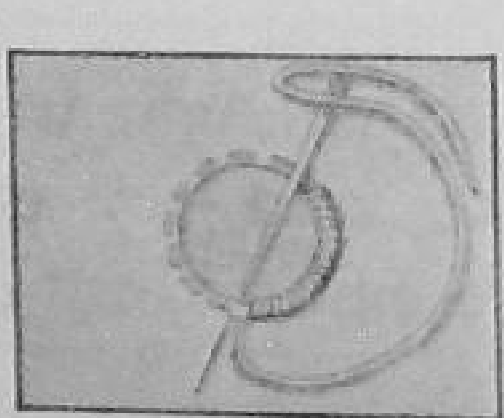
15. Spoke or Ray Stitch.



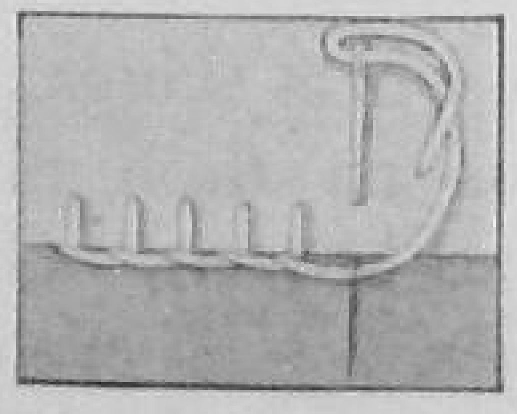
16. Back Stitch for Rambler Rose.



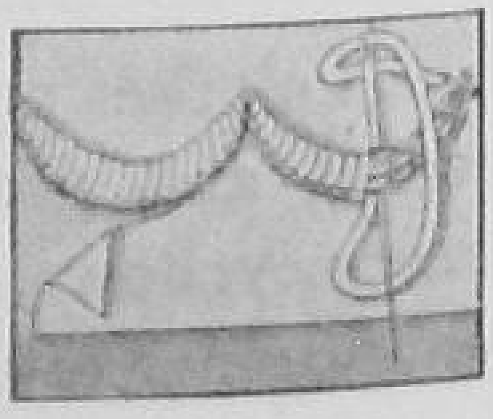
17. Satin Stitch for Veined Leaf.



18. Eyelet, Either Punched or Cut Out.

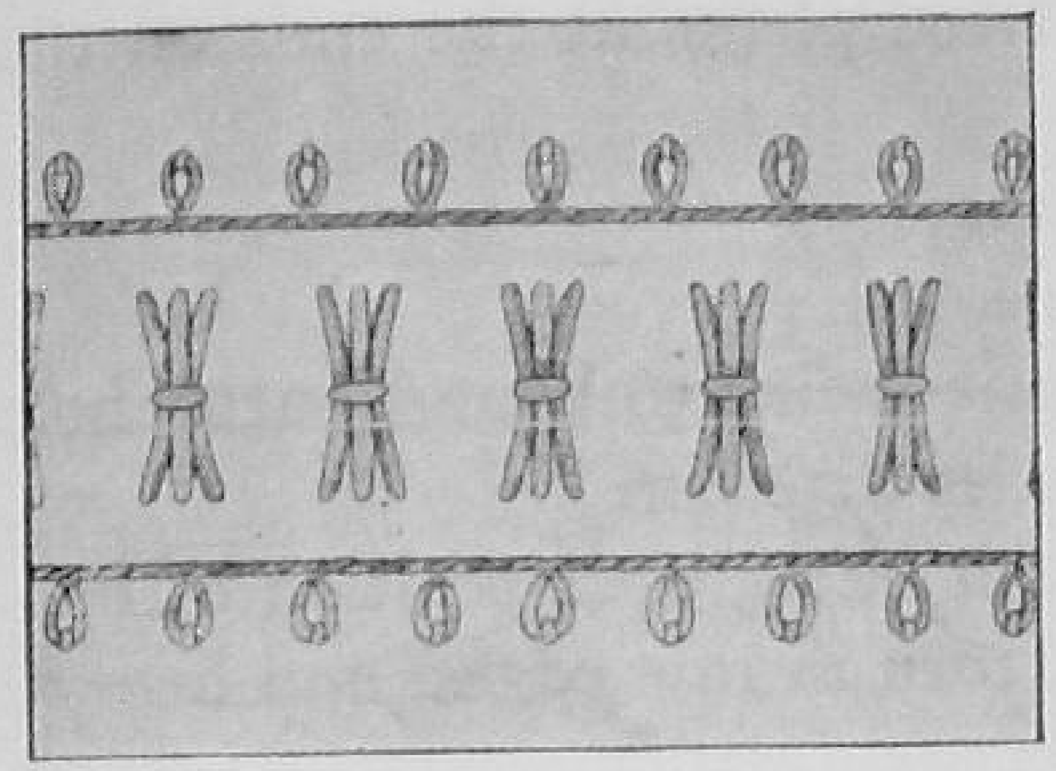


19. Blanket Stitch.

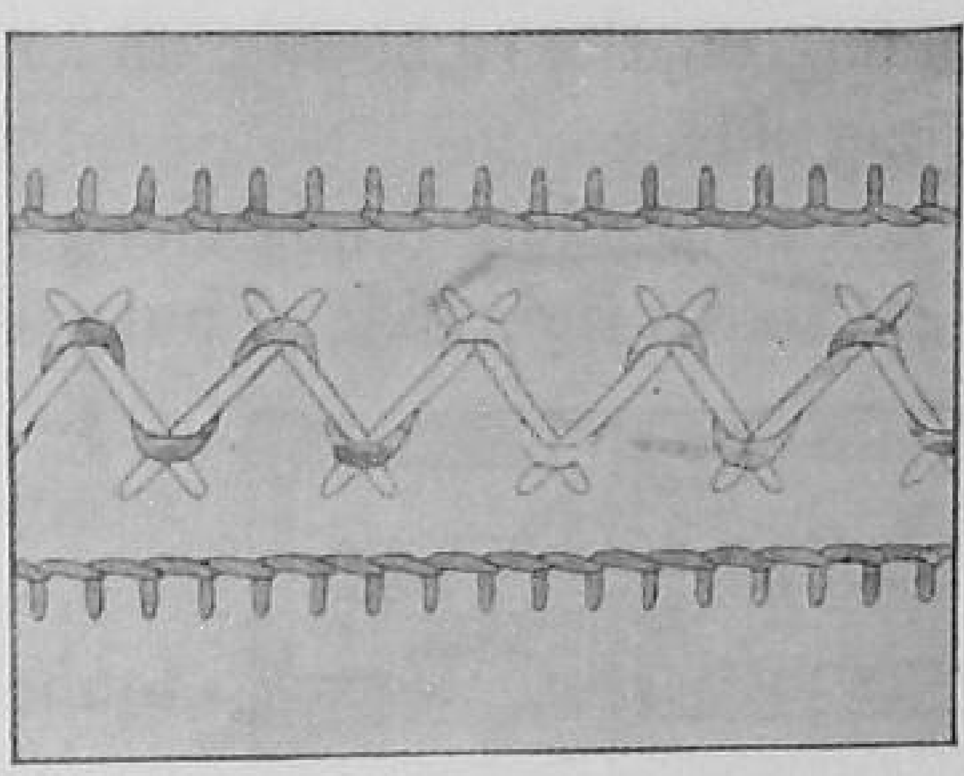


20. Padded Scallops.

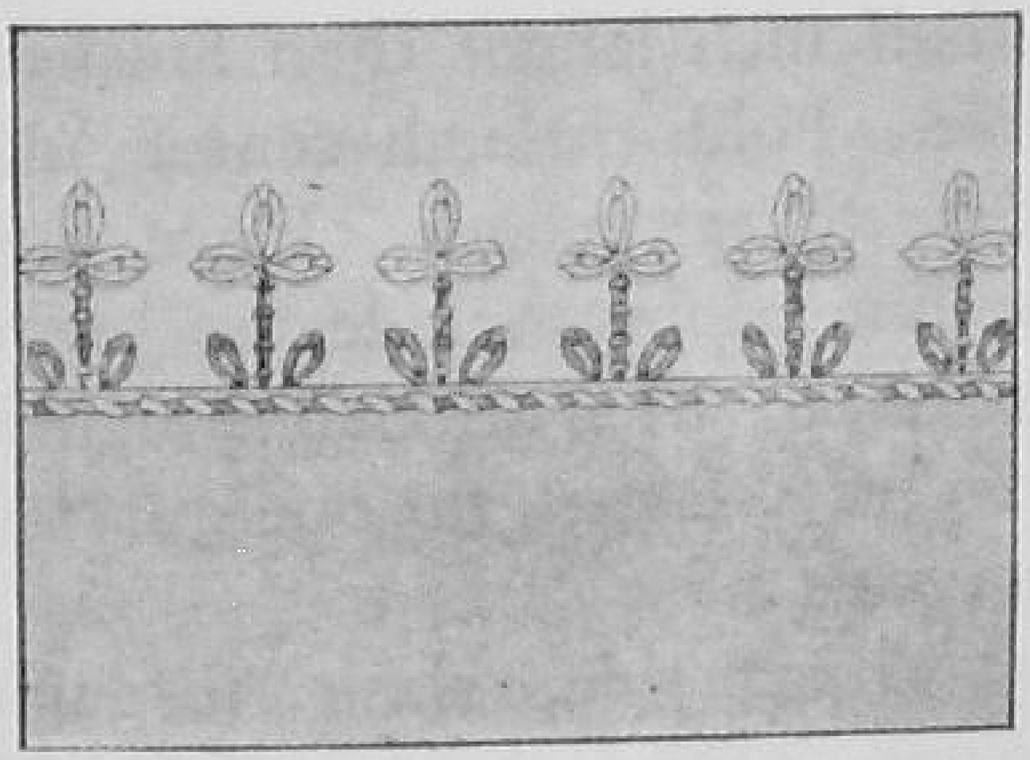
Reprinted through courtesy of The Makers of Clark's O.N.T. and J. & P. Coats Threads. From booklet "Sewing Secrets" (revised edition). Copyright 1934 by The Spool Cotton Company



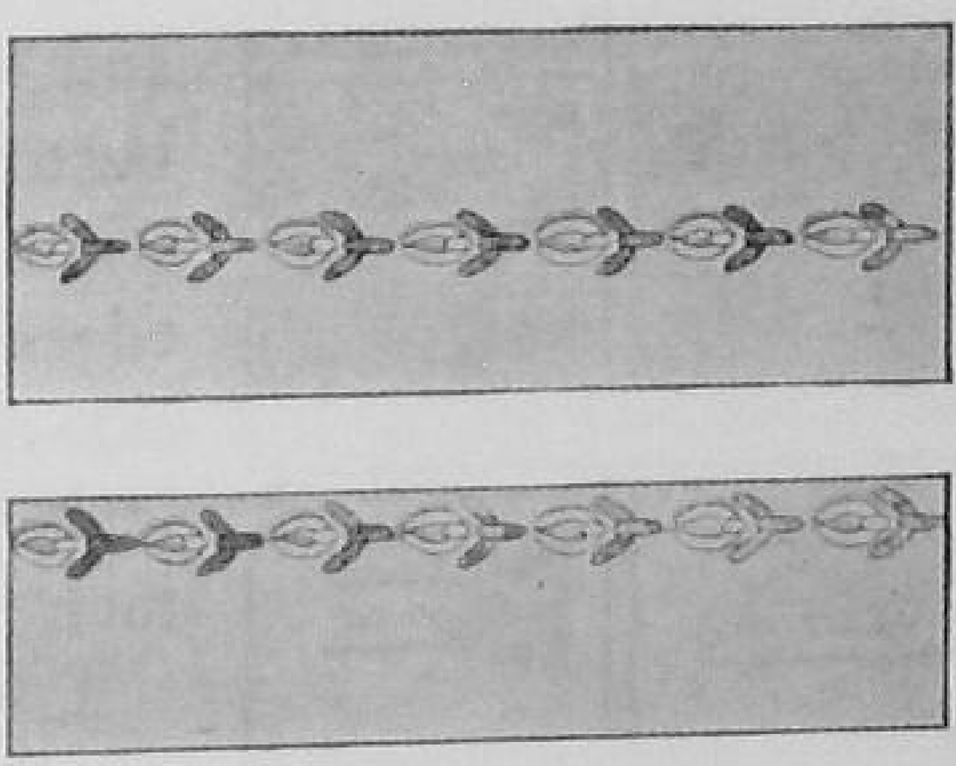
1. Two rows of outline stitch in darkest tone with loop stitches in contrasting color outside, and a row of bundles of same color as loops in center.



2. Two rows of blanket stitch in medium tone. A row of catch stitch in center in light color, with dark thread woven in and out under stitches.



3. Hem or facing top edged with twisted running stitch in dark and light tones. Couching stitch stems, and leaves in loop stitch—usually green. Loop stitch flowers.



4. Loop stitches in lightest tone spaced 1/8-inch apart with Y stitch in darker tone filled in between. Gives flower-like effect. May be used to sew narrow or wide hem instead of feather stitching.

Bound Buttonholes [1]

BOUND BUTTONHOLE WITH FACING

1. Cut a strip, lengthwise or bias, about one and a half inches wide and about three quarters of an inch longer than the length of the finished buttonhole. Baste center of strip over position of buttonhole, right sides together. Stitch one-eighth inch each side of basting and across each end.

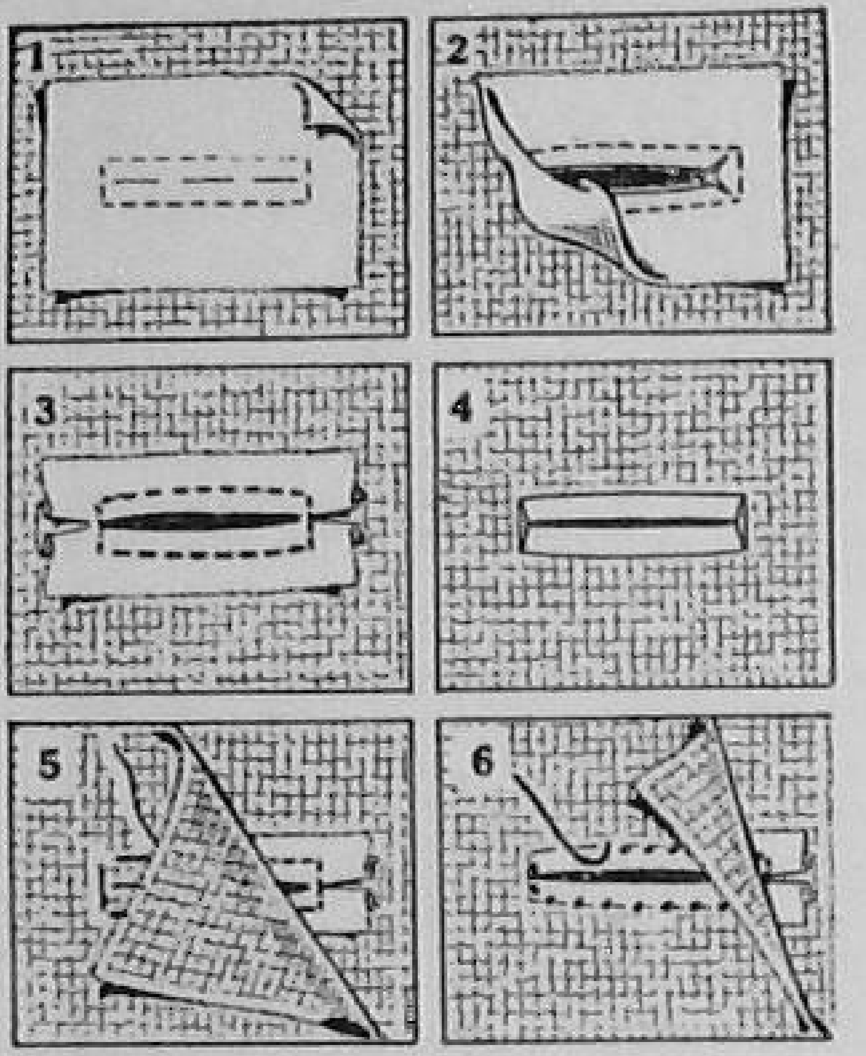
2. Slash through center to one-eighth inch from ends and diagonally to corners. Draw strip to wrong side, forming an even

[1] Reprinted through the courtesy of The McCall Corporation. Taken from "Dressmaking Made Easy" (revised edition). Copyright 1939, by The McCall Corporation

binding on the right side and inverted pleats at the ends on the wrong side.

3. Sew binding firmly along seam.

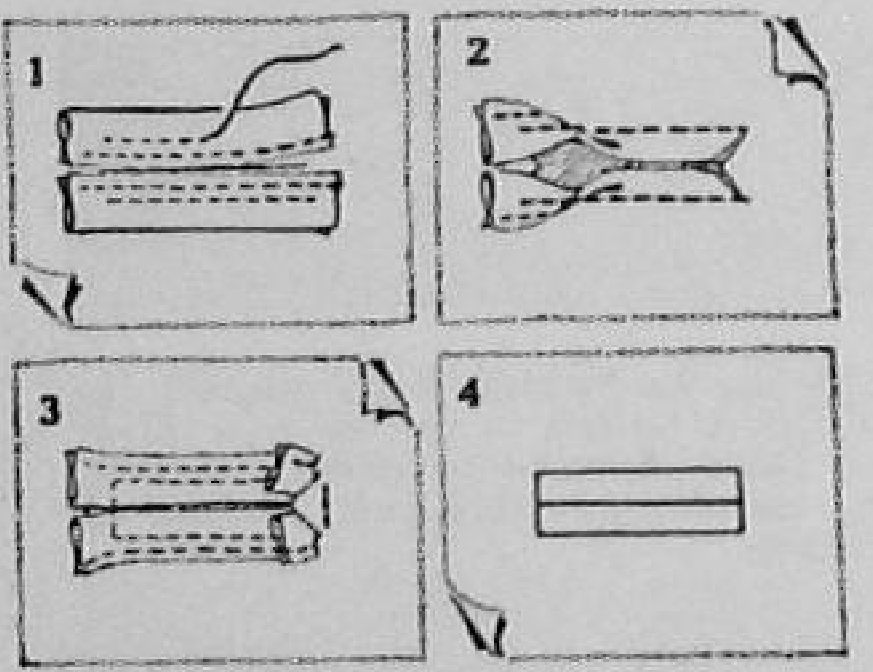
4. Shows right side of buttonhole.



5. Baste facing to bound buttonhole wrong sides together.

6. Slash facing over position of buttonhole, turn in raw edges, and hem to position.

WELT BUTTONHOLE

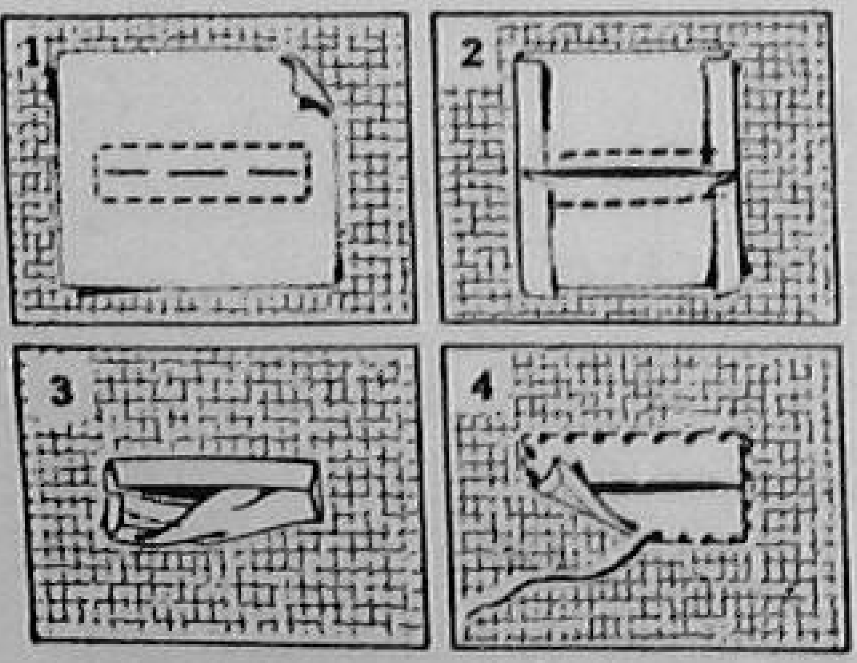


1. Cut two strips, one-half inch wide and one-half inch longer than finished buttonhole. Fold through center and stitch close to raw edges. Place raw edges on line of buttonhole, on right side of material; then stitch one-eighth inch from raw edges to one-quarter inch from ends.

2. On wrong side, slash through center to one-eighth inch from ends and diagonally to corners. Draw strips to wrong side.

3. Sew triangular piece at each end firmly to strips.

4. Shows right side of finished buttonhole. To face wrong side, see directions above, 5 and 6.



BOUND BUTTONHOLE WITHOUT FACING

1. Cut a strip, lengthwise or bias, about one and a half inches wide and about one-quarter inch longer than buttonhole. Baste and stitch strip as described above for buttonhole with facing.

2. Turn in ends and press. Slash through center and through turned-in ends.

3. Draw strip to wrong side and form an even binding.

4. Turn under raw edges and hem.

Zipper Placket Closings [1]

Zippers are now definitely part of the sewer's equipment both for utility and decoration. Zippers, because of their variety in style, material, and length, are adapted for use in all types of closings and every sort of fabric. They are packaged with complete information as to weight, length, and color, as well as instructions for application. In clothing, they make possible a perfect fit and give a trim finished look to the garment. Most important of all, they are easy to put in and smooth sliding. When sewing in a zipper, remember that:

1. The zipper must be kept closed when applying and when washing.

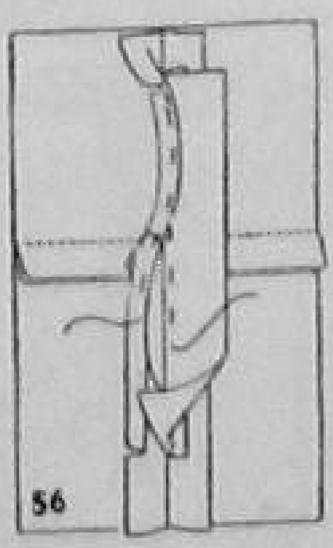
2. The cording foot on the sewing machine will allow the stitching to be made close to the metal or plastic.

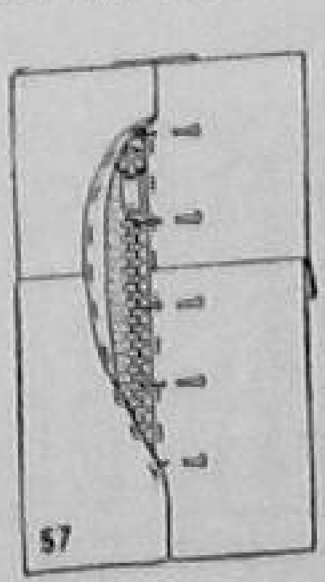
3. The ends of the zipper tape should be concealed in the neck or sleeve binding. The zipper tape is caught in the first stitching and then clipped close to the stitching line.

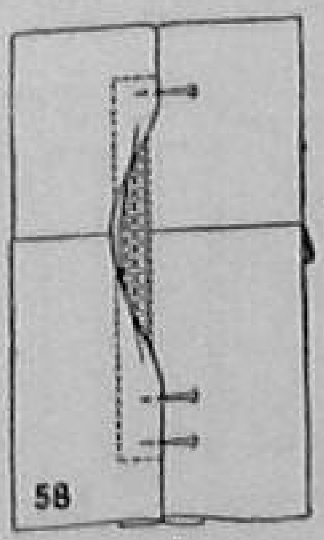
Although complete instructions are included with every zipper, a few of the more frequently used applications are given for ready reference.

in a dress placket (56, 57, 58)

1. Cut strip of fabric one inch wide for facing. Stitch facing to front of opening, then turn to inside and baste edge. Clip back seam allowance half its width as shown. Fold, baste, and press.







2. Turn to right side of garment. Pin and baste closed zipper to back of opening. Stitch zipper tape to back of opening.

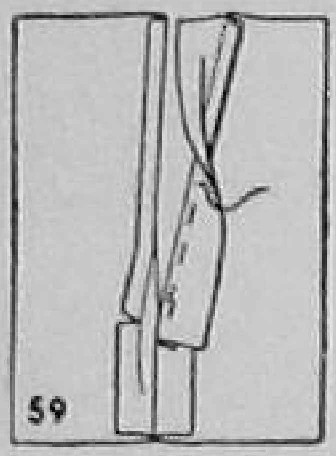
3. Pin front of closed placket to the seam line in order to conceal the zipper. Baste firmly. Turn garment to wrong side and stitch

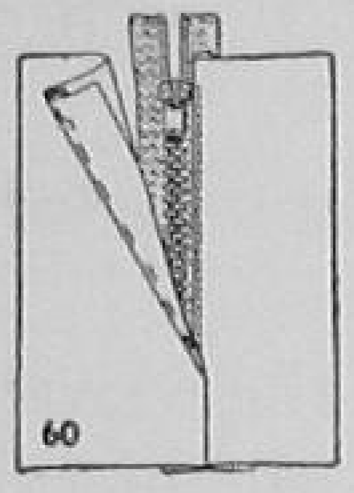
[1] Reprinted through courtesy of The Spool Cotton Company, New York. Taken from "Sew and Save," copyright 1940

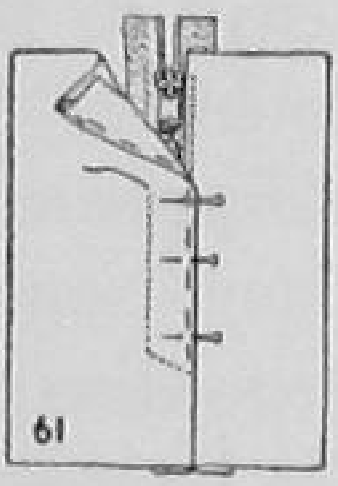
front of garment to tape one-quarter inch above and below seam opening. Draw thread to wrong side and tie, as shown. Press.

IN A PLACKET FOR SKIRTS OR SLEEVES (59, 60, 61)

1. Cut strip of fabric one inch wide for facing. Stitch facing to front of opening. Turn to inside and baste edge as shown. Clip the back seam allowance half its width and turn it back, as shown. Fold, baste, and press.





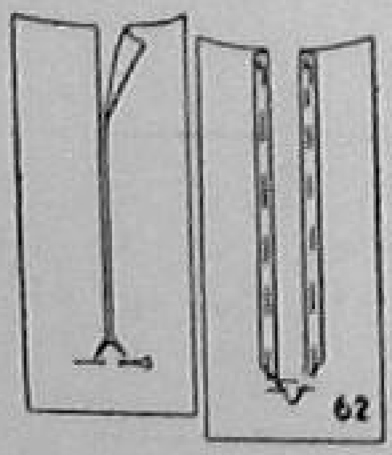


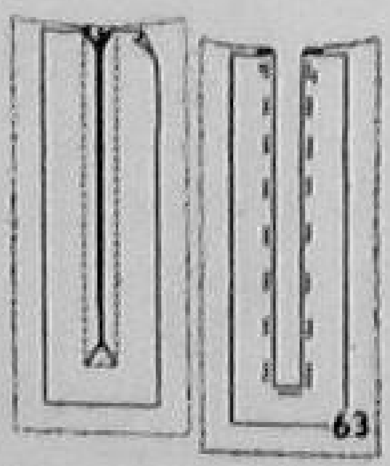
2. Turn to right side of garment. Close the zipper and stitch back edge of opening to the zipper tape, stitching close to metal. Use cording foot.

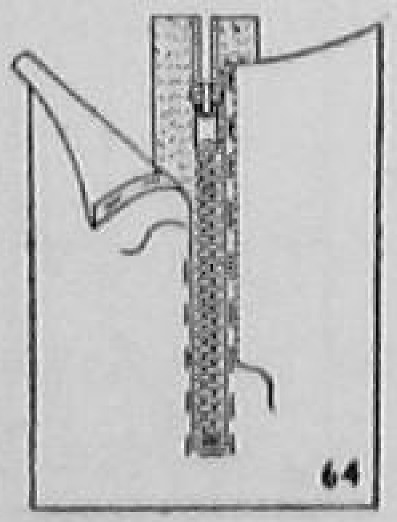
3. Close placket and pin securely as shown. Turn to inside of garment. Stitch zipper tape to front of opening, stitching close to metal as shown.

IN SLASHED OPENINGS (62, 63, 64)

1. For firmly woven fabric, mark length of opening, then slash to within three-sixteenths inch of bottom; then diagonally as shown. Turn edges, baste, and press.







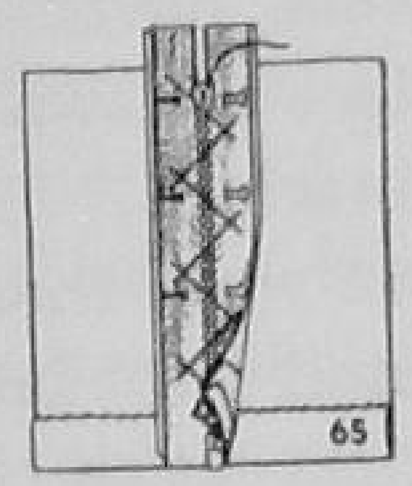
2. If fabric ravels or opening is on bias, mark opening, place straight piece over marking, right sides together. Stitch as shown along side of marking three-sixteenths inch from each side of marking. Slash as shown; then turn facing to inside and baste edges.

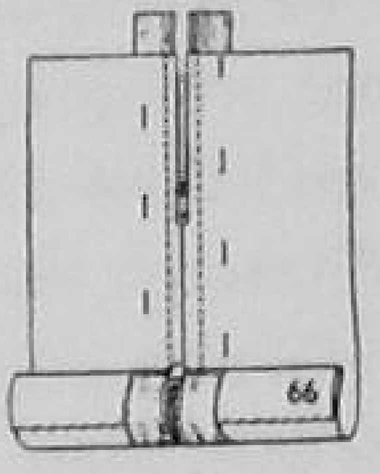
3. Baste and stitch zipper in opening, easing fabric and keeping clear of metal.

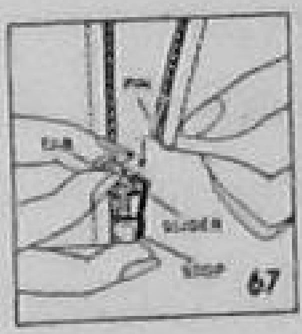
IN JACKET AND COAT OPENINGS (65, 66, 67)

1. Finish hem of jacket in the regular manner. Baste center fronts together on wrong side leaving one-half inch seam allowance. Press seam open.

Place center of closed zipper, right side down, exactly over basted seam. Bottom of zipper tape should be flush with bottom of jacket. Ease fabric onto tape. Pin and baste zipper in place.





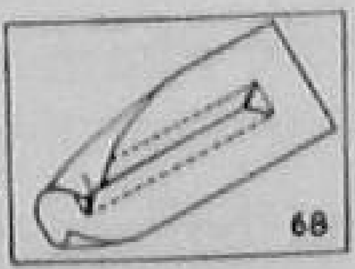


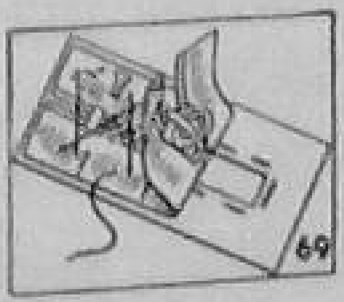
2. Turn garment to right side and stitch one-quarter inch from center seam, using a machine cording foot. Trim seam allowance flush with outside edge of zipper tape. Do not cut off ends of tape at top of zipper until you have stitched them into the neck finish, then clip close to the stitching line. Fasten bottom of tape to hem with a few blind stitches. Remove basting at center front seam.

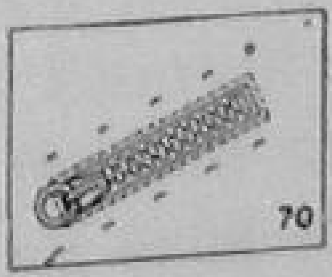
3. To close the zipper, be sure the slide is all the way to the bottom. Insert pin in the slider and push it all the way down so that both sides of the garment are even. Hold in this position while pulling slider up.

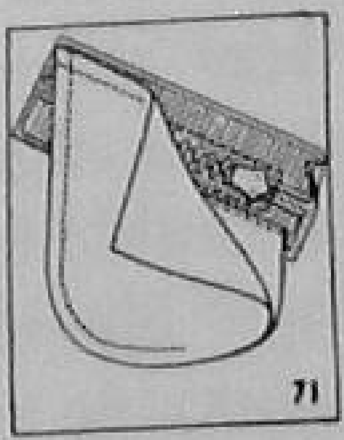
IN A SLASHED POCKET (68, 69, 70, 71)

1. Place facing over marked pocket opening, right sides together. Stitch a box three-eighths inch wide and length of zipper. Slash opening, as shown. Turn facing to inside.









2. Baste around turned edge, then pin and baste closed zipper right side down over inside of opening.

3. Stitch around pocket opening from right side through zipper tape.

4. Stitch pocket pieces to zipper tape and facing as shown.

CLOTHING REPAIR

Children's Clothes.[1] The wearing time for clothes, especially wash garments, can be greatly prolonged by mending them when mending proves a protection. Fabrics that have worn thin in spots can often be reënforced by fine sewing thread used on the machine. In doing this use a medium stitch and stitch back and forth over the thin place to strengthen the worn part. Where necessary, to give additional strength, put a piece of lawn or net underneath the thin place and then darn it by machine.

When a patch is applied, match the warp and woof threads as well as the fabric design. If a new piece of material must be added to a worn garment that has lost color and firmness, wash the new piece several times that it will more nearly agree with the material of the garment. In applying patches by machine, turn the edges, clip the seam allowance at the corners, and press the patch; then pin it to place on the garment. Stitch exactly on the edge, pivoting your needle at each corner so that the patch will appear neat. Cut the material away under the patch and overcast the raw seams, or stitch them from the wrong side to make the edges secure. In patching heavy material, such as khaki, cut out the worn part, place the patch underneath, turn in the raw edges around the hole, and stitch or whip them down.

In mending wool, pull a thread from a lengthwise edge of the fabric and use this thread to darn the worn place. Darning cotton of the right color may be blended in with the lengthwise fabric threads so that the mending stitches will not show.

Union suits can have the sleeves cut off above the elbows, the legs above the knees, and the worn places thus cut away. When the edges are hemmed, such suits become whole again and are desirable for wear through the spring.

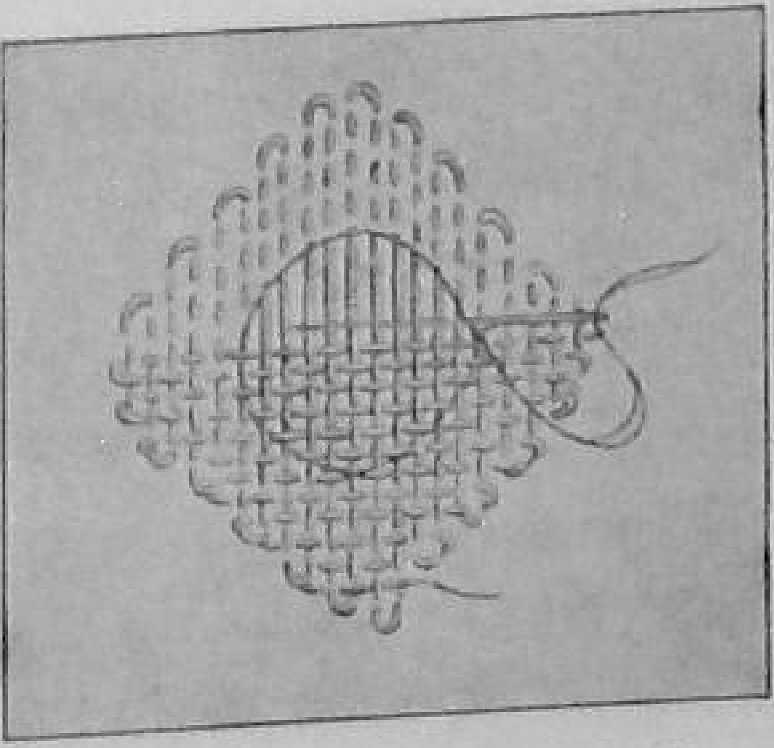
Boys' blouses that have grown shabby around the collars and cuffs may be cut down to a semi-low neck and short sleeves, making comfortable play shirts for warm weather. Little girls' school dresses make admirable play dresses for summer by the same plan.

[1] Reprinted by courtesy of The Singer Sewing Machine Company from "How to Make Children's Clothes." Copyright 1926, 1927, and 1928 by The Singer Manufacturing Company

In lengthening dresses, insert one or two bands above the hem. Cut this band on the bias if the material is a plaid or check, or on the length if it is a stripe, or use a plain fabric if the dress is a print. In making garments that will later need lengthening, use hems one-third deeper than usual. When necessary, open the hem and make a new hem, folding the material so that the stitching line of the new hem comes exactly on the line that marked the bottom of the first hem. The stitching thus conceals the crease line and strengthens it if it is worn.

A deeper band cuff may be added to sleeves, or the cuff may be removed and a band inserted. If a dress needs lengthening and there is not enough material or trimming to insert a band in the skirt, a band may be put in above the belt line about one quarter of the waist length, and a corresponding one put in the sleeves if necessary.

In rejuvenating garments, work to retain a correct balance in design, to equalize the wearing quality, and to harmonize colors so that alterations and adjustments will be blended inconspicuously.



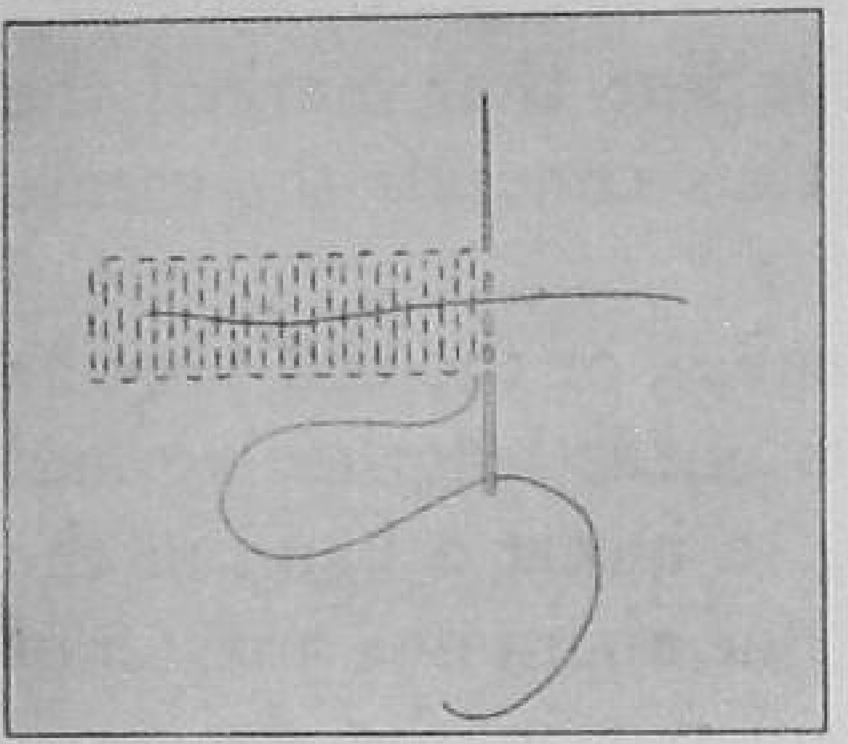
Darning a Stocking or Knitted Undergarment.[1] Select mending floss as near the color and texture of the article to be darned as possible. Use the strands full size or separated to correspond with the weight of the yarn in the stocking, and use a stocking darner to keep the threads from being drawn too tight.

Darn on the right side, preferably, for appearance's sake; but darn on the wrong side if the stocking is heavy, to make the darn more comfortable. Begin the darn without using a knot; leave a short end of floss free, as shown, or take a tiny back-stitch to hold the thread. Start the stitches far enough from the edge of the hole to take in all weak threads. Put in the lengthwise threads first, making rows of running stitches in the form of a diamond to distribute the strain over a greater area and make the darn stronger. Leave a small loop

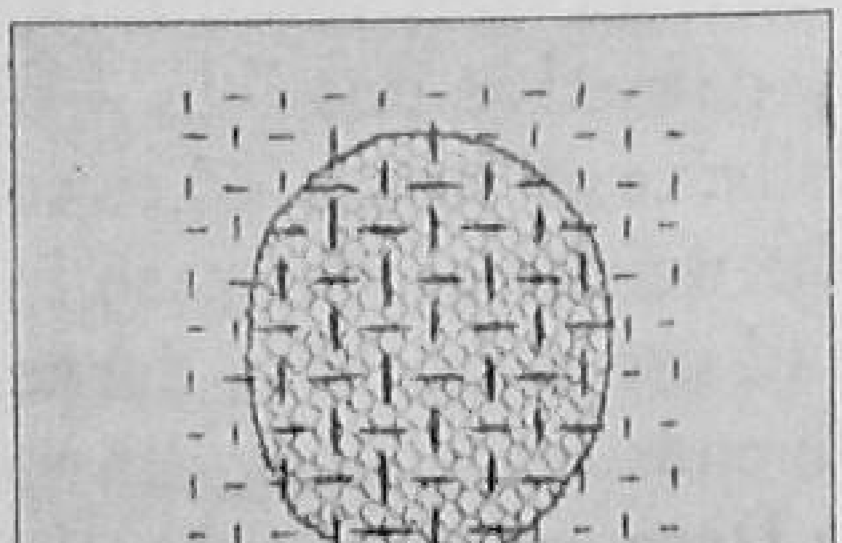
[1] Reprinted through courtesy of The Makers of Clark's O.N.T. and J. & P. Coats Threads. Material taken from booklet "Sewing Secrets" (revised edition). Copyright 1934 by The Spool Cotton Company

of floss at the turning of each row to provide for stretching and shrinkage. When you come near the hole, arrange the stitches so that the needle comes out over the edge of the hole.

When the lengthwise threads have been put in, turn the darn around, and weave the filling stitches over and under the foundation threads already laid. Secure the end of the thread by taking a few tiny back-stitches. Cut off the thread ends quite close.



Mending a Straight or Slightly Jagged Tear.[1] This type of darn is particularly practical for bed and table linens. If the material frays badly, reënforce the tear on the under side with a piece of the same material, matching the grain and design. Use thread of the same color and texture as the material — the size of the warp thread or slightly finer is preferable. Run short stitches back and forth across the tear, keeping the stitches with the grain of the material. Take stitches loose enough so that they will not draw, and pass over the tear in each case, as shown. To keep the darn inconspicuous, let the stitches be as short as possible on the right side. Finish the thread by taking a few back-stitches.

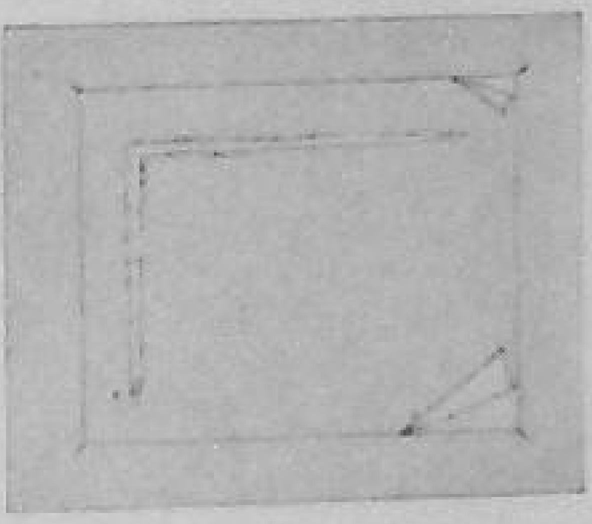


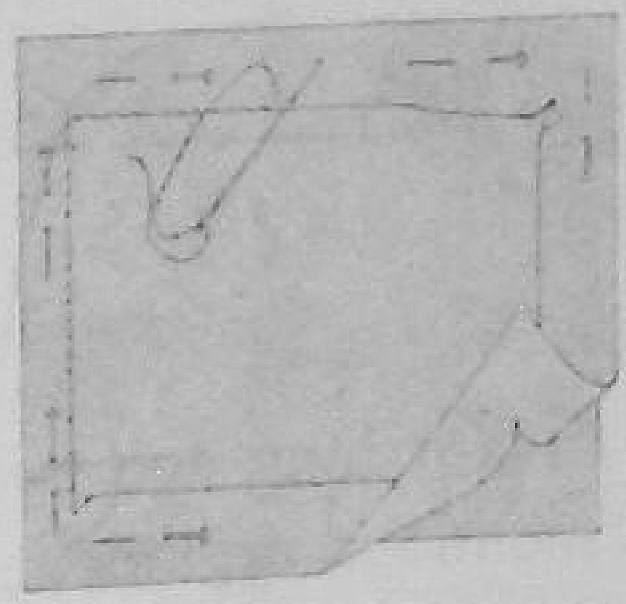
Mending Finely Knitted Material with Net.[1] When a similar piece of material is not available for a patch, as is often the case, net may be used on finely knitted material with very satisfactory results. Baste a piece of net under the hole, and darn it down by taking short running stitches back and forth, as shown. Take rather loose stitches to allow for the elasticity of the material.

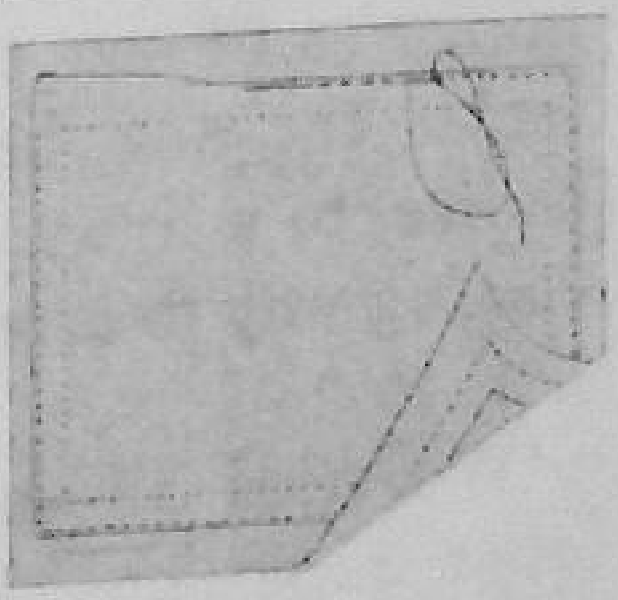
Hemmed Patch.[1] The material around a three-cornered tear is often so weakened that a patch is more efficient than a darn. In

[1] Reprinted through courtesy of The Makers of Clark's O.N.T. and J. & P. Coats Threads. Material taken from booklet "Sewing Secrets" (revised edition). Copyright 1934 by The Spool Cotton Company

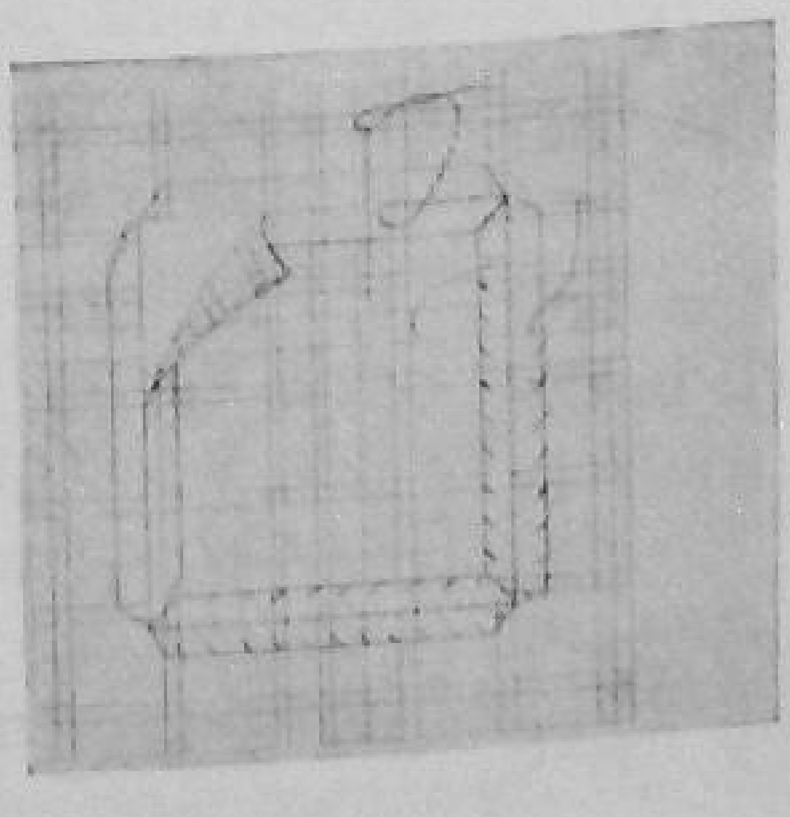
this case square up the hole in cutting the edges of the opening on the thread of the goods and cutting away the weak part. Clip the corners of the opening, as shown in the top sketch at the right so that they may be turned under. Pin the patch material under the opening, turn under the raw edges of the hole and hem them down as shown in the middle sketch. Next, turn to the wrong side, turn the edges of the patch under and sew them down as shown in the sketch at the bottom. Always be careful that the grain of the goods runs the same way in the patch as in the material that is being mended, and be sure that figures, plaids and stripes match.

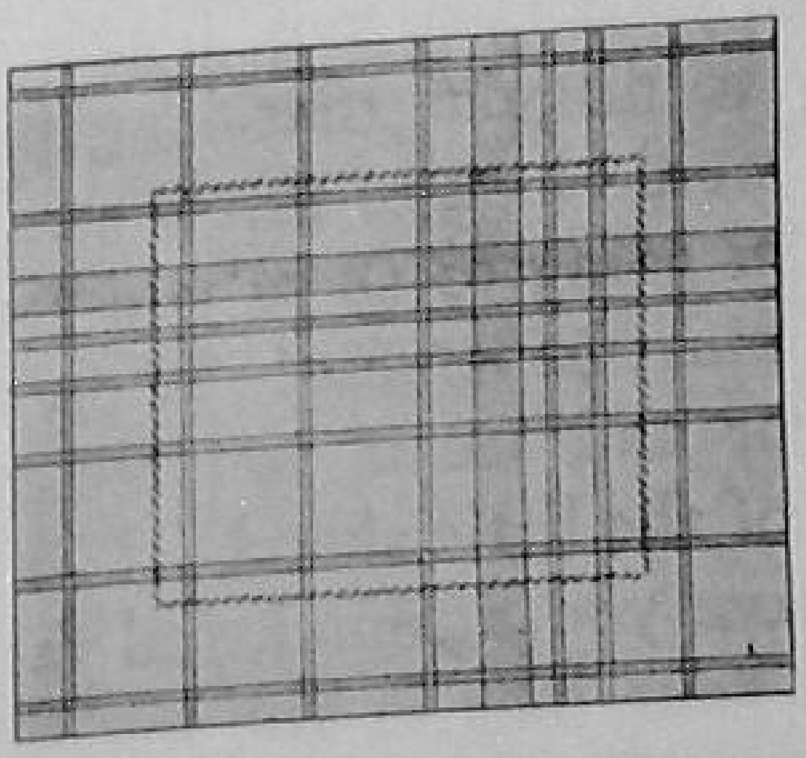






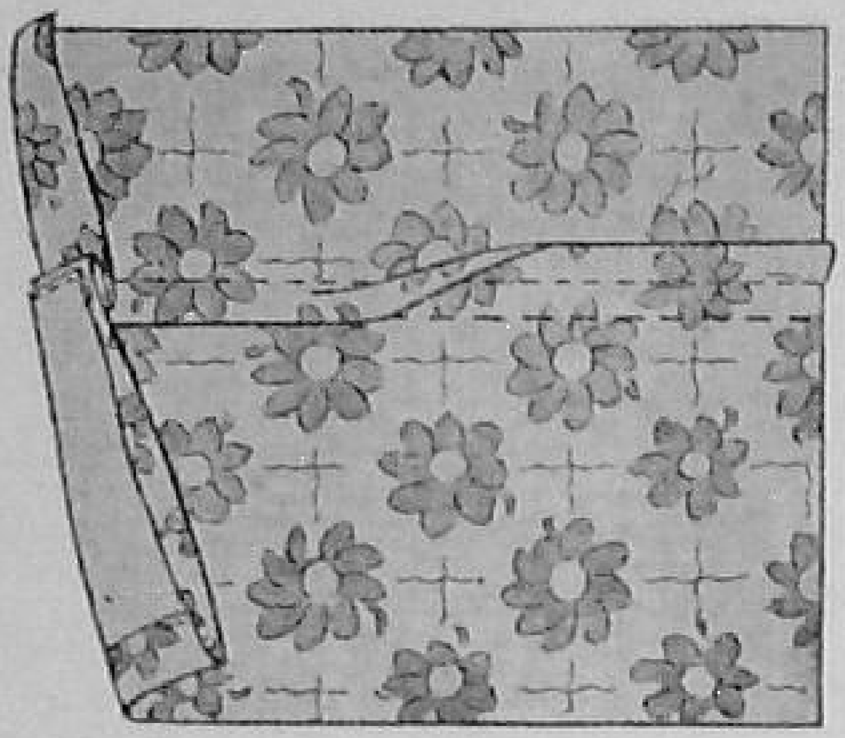
Overhand Patch.[1] Not as strong as a hemmed patch but less conspicuous. Square up the hole as for a hemmed patch, turn back the edges; then fit the patch piece into the hole exactly with its edges turned back as shown in the lefthand sketch below. Now, overhand the patch in place with tiny stitches on the wrong side as shown. Overcast the raw edges, and press thoroughly. The sketches illustrate clearly the accuracy with which patches should be matched to the grain and the design of the fabric.





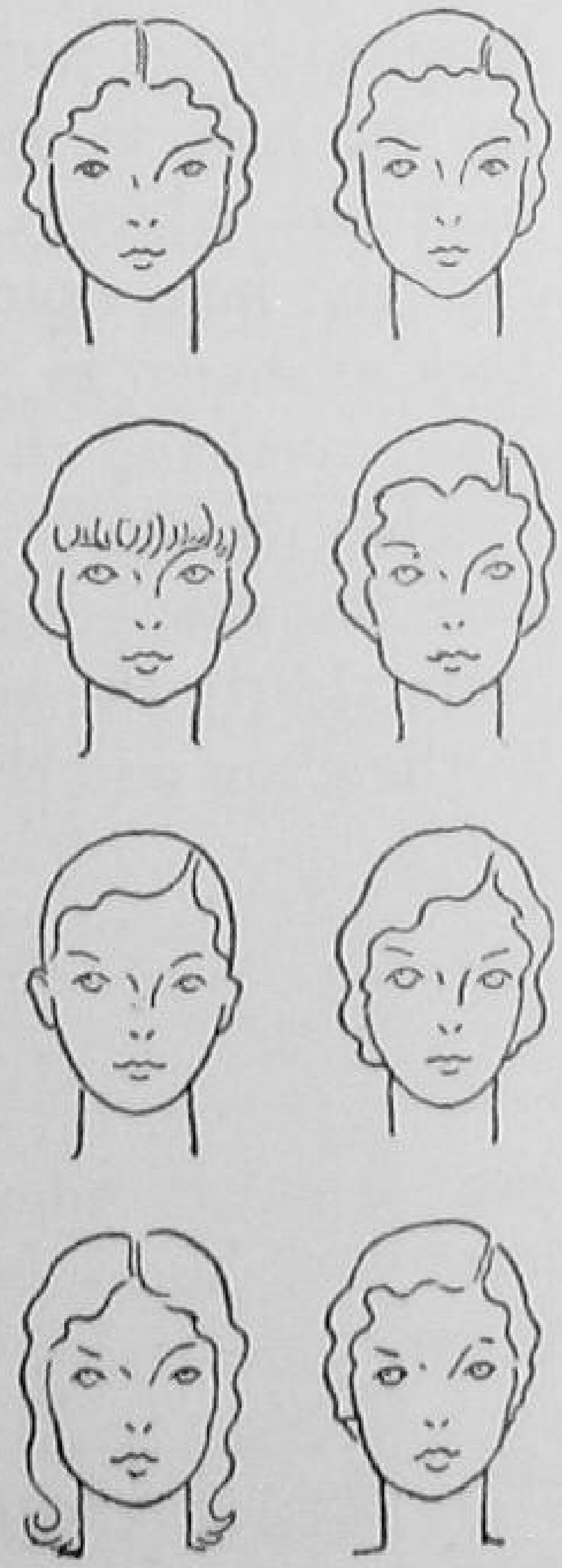
[1] Reprinted through courtesy of The Makers of Clark's O.N.T. and J. & P. Coats Threads. Material taken from booklet "Sewing Secrets" (revised edition). Copyright 1934 by The Spool Cotton Company

Lengthening Garments.[1] If there is an unsightly worn or faded line which shows where the hem was turned, take a narrow tuck above that line to conceal it. Apply the facing as usual, stitching the upper edge permanently in place under the tuck. Do not stitch through the tuck. If this method will not provide sufficient length, apply the entire hem, and conceal the joining under the tuck.



CUNNING COIFFURES[2]

Not long ago two Sub-Deb friends of mine were having a tremendous argument before my dressing-table mirror as to how they should wear their hair under the new hats. And this led on, of course, to a lively discussion of the most becoming way to arrange their hair — hat or no hat.



We tried all sorts of experiments — and what miraculous changes we brought about! It was almost unbelievable that a new coiffure could make such a difference in eyes and noses!

Have you tried experiments with your own hair? Do you know how to arrange it to make your eyes look bigger? Do you know how to disguise that long pointed nose that you would love to throw away?

I'm going to show you some tricks — and you must be honest! Look at yourself in the mirror and see if you recognize yourself in any of the little sketches!

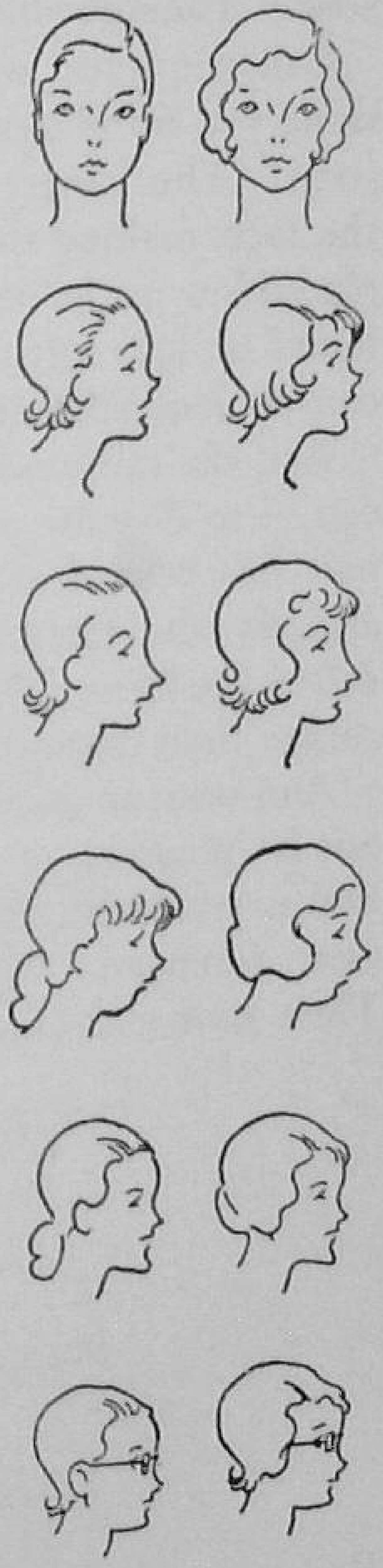
Have you a round, full face? Then don't part your hair in the middle. It will make

[1] Reprinted through courtesy of The Makers of Clark's O.N.T. and J. & P. Coats Threads. Material taken from booklet "Sewing Secrets" (revised edition). Copyright 1934 by The Spool Cotton Company

[2] Written by Elizabeth Woodward. Reprinted through courtesy of *Ladies' Home Journal*. Copyright 1932 by The Curtis Publishing Company

your face look even wider. Part it high at the side. Reserve the center part for the girl with the long, slender face. It is a help to her; will make her face seem wider.

Bangs worn low over the forehead seem to cut the face in two — making it seem shorter and wider. Avoid bangs if your face is wide. Indulge in them if your face is narrow and long — or if you have an unusually high forehead. But remember that hair worn low makes the eyes look larger.



A severe boyish bob worn back over the ears is trying — even for the face with regular features. It makes the face seem more than usually wide and it makes all the features more prominent. Softly waved hair over the ears tends to decrease the apparent width of the face, and is generally more becoming. Look at the third sketch on page 628.

If your face is wide, don't wear your hair loose at the nape of your neck. In the bottom sketch on page 628 this style combined with a center part is just what should be avoided with a full face. Wear your hair in a close knot on the level with the lobes of your ears, which are revealed, and the face and neck will appear more slender.

The close severe hairdress seems to emphasize the size and shape and features of the face, and we recommend it only for the girl whose face is oval in shape and whose features are very regular. The soft, loose hairdress, on the other hand, makes a lovely frame for the face and makes a prominent nose less evident.

Remember that severe arrangements of the hair tend to give undue prominence to the features of the face. The second girl above with her perky turned-up nose has emphasized it by combing her hair straight back from her forehead, and by revealing her ears. Hair worn softly over the forehead and the cheeks makes her turned-up nose pert and cute — rather than unattractive.

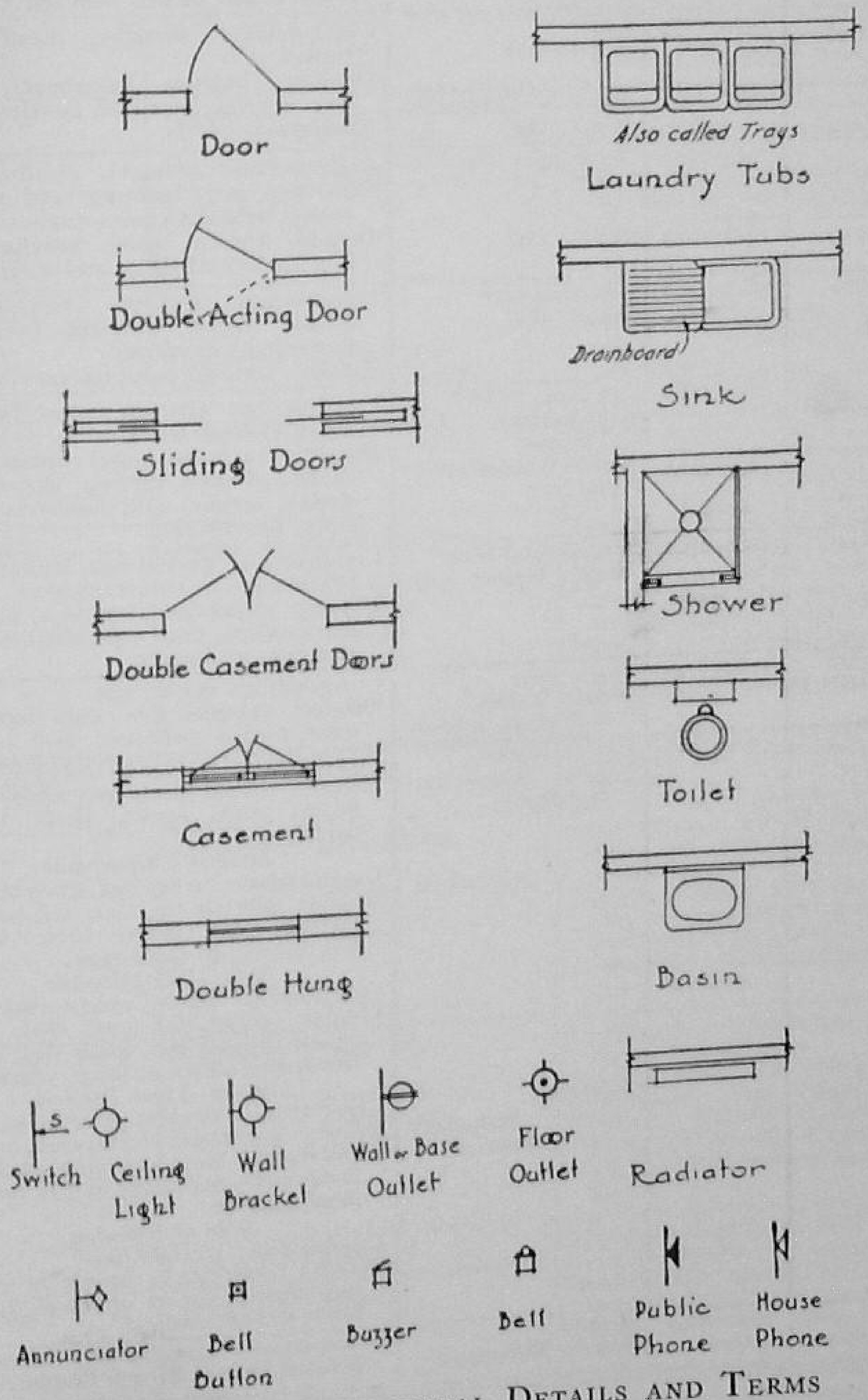
The same rule holds true for the long pointed nose. The hair combed back from the forehead seems to lengthen the already long distance from the tip of the nose to the hairline. And wearing it back from the ears lengthens the line from the ear to the tip of the nose. The right-hand sketch shows a more becoming arrangement.

Can you guess what's wrong with the next picture? The very thing you want to disguise — a receding chin — has been emphasized. The bangs tend to focus attention on the upper part of the face, making the chin even more insignificant. And the knot placed low at the neck emphasizes the lack of chin. Correct these faults by hair softly waved, dipped low at each cheek, and an inconspicuous knot at the back of the head.

And the same rules apply in the next to the last sketch on page 629 — to disguise a prominent chin that you want to hide. The hair has been drawn back from the forehead and ears, revealing entirely the features of the face. Nothing has been done to soften the lines. And the large knot placed low tends to emphasize rather than disguise the protruding chin line.

And what to do about glasses? Why, make them as inconspicuous as possible, of course. Don't let them stick out unadorned and unconcealed like blinkers. Don't comb your hair back from your forehead. Soften up your hair at the temples and ears. Then your glasses won't seem so conspicuous.

III. THE WELL-PLANNED AND FURNISHED HOUSE



Some Architectural Details and Terms

Reprinted by permission of "Good Housekeeping Studio" from the bulletin "Architectural Details and Terms." Copyright 1931

FURNITURE CHARTS

England[1]

SOVEREIGN	DATE	STYLE	PRINCIPAL CHARACTERISTICS
Henry VII . . .	1485–1509	*Gothic* Wood: Oak	Construction: straight line, massive. Trestle tables, stools, benches, chests.
Henry VIII . . .	1509–1547	*Tudor* Wood: Oak	Construction: straight, massive, and formal. Details: bulbous ornaments, Tudor rose, carving, linenfold, paneling. Renaissance motifs.
Elizabeth	1558–1603	*Tudor or Elizabethan* Wood: Oak	
James I	1603–1625	*Jacobean or Stuart*	Construction: straight, sturdy, squat. Draw-top, early gate-leg and refectory tables, wainscot chairs, cupboards. Details: twisted wood, paneling, carving, applied moldings and ornaments.
Charles I	1625–1649	Wood: Oak	
Cromwellian Era .	1649–1660	*Commonwealth* Wood: Oak	Construction: straight. Chairs with low, square backs. Gate-leg tables and table chairs developed. Details: turning, paneling, carving.
Charles II	1660–1685	*Carolean, Stuart, or Restoration, Late Jacobean*	Construction: straight except for lavish use of Flemish scroll. Details: twist or spiral turning, cane backs and seats, carving, lacquer, marquetry, applied split balusters, upholstery, Spanish feet.
James II	1685–1688	Wood: Walnut replacing Oak	
William and Mary .	1688–1702	*William and Mary* Wood: Walnut	Construction: curved line, lighter, graceful, adapted to human comfort. Details: serpentine stretchers, bun feet, cup turnings, hood tops, shaped aprons, paneling, marquetry.
Anne	1702–1714	*Queen Anne* Wood: Walnut. Mahogany appears	Construction: curved line. Details: cabriole legs, club feet, solid splat, broken pediment, shell carvings.
George I–III . . .	1714–1820	*Early Georgian* Woods: Walnut and Mahogany	Construction: similar to Queen Anne. Details: animal heads and paws, masks, swags, shells, scrolls, hoofs, lacquer, carving. *Style of Chippendale* Construction: curved and straight. Details: cabriole leg, claw and ball foot, pierced splat, ladder back. Chinese fret, carving of finest type. *Style of Hepplewhite* Construction: curved except chair legs. Details: shield and oval chair backs, square tapered legs, spade feet, serpentine fronts, painting, inlay, veneer.
		Georgian Woods: Mahogany and Satinwood	*Style of Adam Brothers* Construction: straight, small in scale. Details: legs square and tapered, or round and fluted. Oval and wheel backs, urn finials and other classic motifs, painting, inlay, carving. *Style of Sheraton* Construction: straight line. Details: chair backs square or oblong, legs tapered, square or round, turning, inlay, fluting, reeding.
George IV . . .	1820–1830	*Empire* Wood: Mahogany	Construction: straight and curved. A debased form of French Empire.

[1] Reprinted through courtesy of The Century Furniture Company. Taken from "Furniture." Copyright 1930 by The Century Furniture Company

FRANCE[1]

SOVEREIGN	DATE	STYLE	PRINCIPAL CHARACTERISTICS
	12th, 13th and 14th Centuries	*Gothic* (originated in France)	Construction: straight, heavy, ecclesiastical type. Trestle, tables, stools, chests, cupboards, paneled back and canopy chairs.
Louis XII	1498–1515	Woods: Pine and Oak	Details: trefoil, quatrefoil, pointed arch, linenfold, panels, lion paws, heavy stretchers, elaborate carving.
Francis I	1515–1547	*François Premier* Wood: Oak (Renaissance in France)	Construction: straight, scale and less massive than Italian Renaissance.
Henry II	1547–1559	*Henri Deux* (Renaissance in France)	Marked progress in wood carving, tapestry weaving, and manufacture of textiles.
Francis II	1559–1560	(Renaissance in France)	
Charles IX	1560–1574	(Renaissance in France)	
Henry III	1574–1589	(Renaissance in France)	Decline of Renaissance. Furniture less refined and overloaded with meaningless ornament.
Henry IV	1589–1610	*Henri Quatre* Wood: Walnut (Renaissance in France)	
Louis XIII	1610–1643	*Louis Treize* Wood: Walnut	Construction: straight and curved. Details: scrolled or turned legs, spiral or twist turning, inlay, marquetry, upholstery becoming general.
Louis XIV	1643–1715	*Louis Quatorze* Woods: Oak, Walnut, Ebony	Construction: mainly straight, massive in scale, formal. High-backed, carved and upholstered chairs, commodes, and marble-topped console tables of special interest. Details: metal mounts, carving, painting, gilding, inlay, marquetry, lacquer, straight and curved stretchers, cloven hoofs.
The Regency	1715–1723	*Regence*	Transition from Louis Quatorze to Louis Quinze.
Louis XV	1715–1774	*Louis Quinze* Woods: Mahogany, Walnut, Ebony	Construction: curved line, elaborately decorated, expressing luxury, grace, and sensuous beauty. Details: cabriole leg with French scroll foot, bombe fronts, draped canopies over beds, rococo scroll, carving, inlay, marquetry, painting, gilding, veneering, metal mounts.
Louis XVI	1774–1793	*Louis Seize* Woods: Walnut, Mahogany, Satinwood	Construction: straight line, small in scale, classic in detail. Details: chair backs upholstered, carved or caned. Legs straight fluted or carved. Methods of decoration as in Louis XV period. Classical motifs including urns, pendant husks, lyres, oak leaves.
			Transition from Louis XVI to Empire.
The Directory	1795–1799	*Directoire*	
Napoleon	1799–1814	*Empire*	Construction: straight and curved. Proportions heavy, ponderous. Details: paw and claw feet, columns, wings, cornucopias, pineapples, brass and ormolu mounts, painting, gilding.

[1] Reprinted through courtesy of The Century Furniture Company. Taken from "Furniture." Copyright 1930 by The Century Furniture Company

America [1]

	Historical Events	Date	Style	Principal Characteristics
Early American	England lays claim to most of North America following visit of John Cabot	1497		
Early American	Jamestown Colony . .	1607	*Early American or Colonial* Woods: Oak Pine Maple Ash Hickory	Construction: straight, sturdy, in the Elizabethan and Jacobean traditions. Brewster and Carver chairs, the frames filled with spindles, also slat-back chairs, from 1620. Trestle and gate-leg tables, chests carved and paneled, oak with pine lids. Court and press cupboards. 1640–1680. Details: applied split spindles and bosses. Flemish paneling, carving, turning. Rush seats common. Charles II type of chair, high, narrow, backs and scrolled legs, 1666–1695. Apple or pear wood, usually painted. Butterfly tables about 1670. Hadley chests carved and painted, produced in the Massachusetts Colony, 1690–1710. William and Mary and Queen Anne types introduced.
Early American	Landing of Pilgrims . .	1620		
Early American	Massachusetts Colony founded by Puritans . .	1630	Mahogany introduced 1710	
Georgian	Stamp Act .	1765		
Georgian	Battle of Bunker Hill	1775		
Georgian	Declaration of Independence . . .	1776	*Georgian Styles* Woods: Mahogany Cherry Walnut Curly Maple	Secretaries, corner cupboards, Windsor and wing chairs, high boys, low boys, and dressers popular. Chippendale, Sheraton, Adam and Hepplewhite influence strongly evident in American products, but the designs were simplified and inlay was usually replaced with carving. Block front desks and secretaries, sideboards, piecrust tables. Chest of drawers with serpentine fronts and bracket or ball and claw feet, 1760–1775. Sideboards about 1788.
Georgian	Alliance with France . .	1778		
Georgian	Cornwallis' Surrender .	1781		
Georgian	Constitution of United States . .	1789	*American Empire* *Duncan Phyfe* 1795–1847 Wood: Mahogany	Construction: curved and straight, massive and often clumsy. High and low four-posters with pineapple finials, sleigh beds, bureaus, chests, and sideboards, with fluted or twisted columns, lion paw feet, and swell fronts. Sofas with lion paw, eagle claw, or cornucopia supports and scrolled ends. Stenciled furniture about 1820. Details: as French Empire, carving taking place of metal mounts.
Empire	War with England . .	1812		

[1] Reprinted through courtesy of The Century Furniture Company. Taken from "Furniture." Copyright 1930 by The Century Furniture Company

Characteristics of Outstanding Periods [1]

PERIOD	WOODS	UPHOLSTERING FABRICS	MODERN USE
French:			
Louis XIV	Oak, walnut, ebony, chestnut	Rich tapestries, Gobelins, velvets	In large homes, hotels, where dignity is desired
Louis XV	Oak, rosewood, mahogany, walnut, beech, and inlays	Needlepoint, tapestries, damasks, velvets, prints	Where ornate elegance is desired
Louis XVI	Beech, mahogany, walnut, rosewood, satinwood	Delicate damasks, brocades, silks, satins	Well adapted to all rooms, particularly bedrooms
Empire	Mahogany, ebony, rosewood	Rich, heavy fabrics, leather	Blends with Phyfe style. Also the modern
Early English:			
Jacobean	Oak, some walnut	Needlepoint, velvet, leather, brocades	Very popular in dining room, bedroom
William and Mary, Queen Anne	Walnut	Needlework, chintzes, damasks, leather	Well adapted to simple, dignified, livable homes
Georgian:			
Chippendale	Mahogany	Brocades, needlepoint, leather	Chairs, very popular; also for tables
Hepplewhite	Mahogany, satinwood, rosewood, inlay	Light brocades, damasks, haircloth, rush	One of most widely used to-day in living room, dining room, and bedroom
Sheraton	Satinwood, rare woods for inlay with mahogany	Damasks, brocades, haircloth	Much used in delicately graceful rooms
Adam Bros.	Mahogany, maple, pine (painted or gilded)	French brocades, moiré	Against tasteful, formal backgrounds, with Louis XVI
American:			
Early American	Maple, oak, pine, ash, fruit woods	Rush, chintz	Against rugged backgrounds
Colonial	Mahogany, black walnut	Chintz, haircloth	Well suited to Colonial homes
Duncan Phyfe	Mahogany, although some reproductions are in walnut	Brocades, satins, damasks, haircloth. Pattern often had stripe	Against refined background

KITCHEN PLANNING [2]

The number of workers will help to determine the size of the kitchen wherever there is a choice. This, in turn, will depend on the number of persons in the family and perhaps also on the

[1] Reprinted through courtesy of the U. S. Department of Commerce, Wood Utilization, from "Furniture: Its Selection and Use." Copyright 1931 by United States Government Printing Office

[2] Reprinted from "Red Wheel Magic," a publication of The American Stove Company. Article written by D. E. Shank, Home Economist with the company

amount of the family income. The amount of work and kind of work which must be done in the kitchen is also a factor, especially when remodeling. Very old kitchens may have laundry tubs in them and in some instances there may be no set tubs, but laundry must be done there, so space must be allowed.

Whether the kitchen is new or old, a number of things must be considered:

Choice of Equipment. The choice of equipment will depend on the amount of money which can be allowed; on the size of the family; on family eating habits; and on the size and layout of the kitchen.

Up-to-date equipment reduces labor and produces efficient and satisfactory results. Tables should have smooth tops, and counters on cupboards should be covered with some material which will be easily cleaned, smooth, durable, and non-absorbent. Enamel, linoleum, well-dried and properly treated wood, monel metal, and rubber composition of some sort make satisfactory tops.

The modern sink comes all in one piece with a faucet that mixes hot and cold water until the proper temperature is reached. It should swing out of the way, as this gives more work room and helps to reduce dish breakage. Two drain boards are desirable if space and money permit. Mechanical dish washers are available as parts of the sink, or they can be secured in separate units. For many families, they are great labor-savers. Sinks come in a variety of materials, among the most common of which are monel metal, porcelain, and tile.

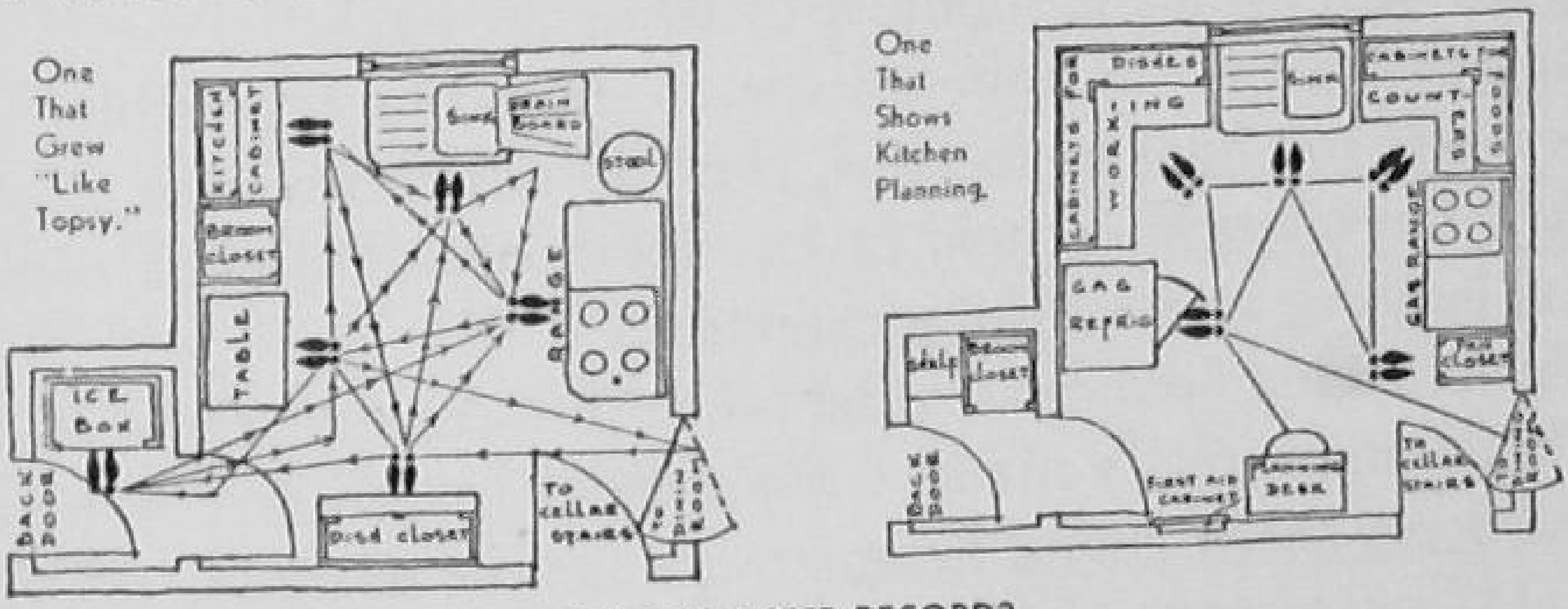
One of the most used pieces of kitchen equipment is the stove. Modern stoves have many desirable features. Heat regulators and insulated ovens are now taken as a matter of course. Automatic lighters, non-clog burners, smokeless broiler pans, and high burner trays are labor-saving devices. Time clocks also may be included on up-to-date gas stoves. Above all, the stove should be well built and attractive in appearance.

Other labor-saving devices, such as mechanical mixers, may be desirable, but it may also be necessary to make a choice unless the budget allowed is practically unlimited.

Placement of Equipment. As far as possible, equipment should be placed with a definite relationship of each piece to the others.

This rule applies especially for the large pieces, but is applicable for all that are more or less in constant use. The arrangement of the equipment must necessarily depend on the wall, window, pantry, cupboard, and door arrangements. Then, too, it will depend on the habits of the person who is to work here. The placement of equipment makes a great deal of difference in the number of steps that must be taken by the worker.

WHICH KITCHEN DO YOU LIVE IN?



WHAT IS YOUR DAILY FOOT STEP RECORD?
DO YOU CROSS AND RECROSS YOUR OWN PATH?
CHECK YOUR STEPS—SAVE ENERGY—TIME—SHOE LEATHER

Reprinted by permission of American Gas Association. Taken from "The New Technique in Kitchen Work." Copyright 1933 by American Gas Association.

When working in a kitchen, the usual procedure is from a food storage compartment — either refrigerator or cupboard — to the work table or sink. Then to the stove for food which is to be cooked or to the dining-room table for that food which requires no cooking.

Floor plans should be drawn according to scale by a draftsman. Furnishings cut out of cardboard according to scale can be arranged in a variety of ways until the best arrangement is determined. Consider whether or not there is to be a breakfast corner. Study the working habits of the person who is to work in the kitchen. Efficiency may be lost in trying to change working habits of people.

If possible, plan drainboards on sinks and cupboards for dishes to accommodate the worker, depending on whether she washes the dishes from right to left or left to right.

Working Spaces. — Working spaces should allow sufficient room for motion without crowding. This avoids hitting doors or corners of furnishings when a person moves in a hurry. Individuals differ greatly in the amount of working space they find most desirable. Often, too little room is more hampering and inefficient than when working space is too ample.

Working Heights. Equipment should be at a convenient working height for the person who is to carry on the work. The proper height is one at which she can work comfortably without having to raise the arm from the shoulder or bend the back.

Storage Spaces. Cupboard spaces should be accessible. When shelves are too high or too low, they do not contribute to efficient work. Let other household tasks outside of the kitchen contribute to the bending and reaching exercises.

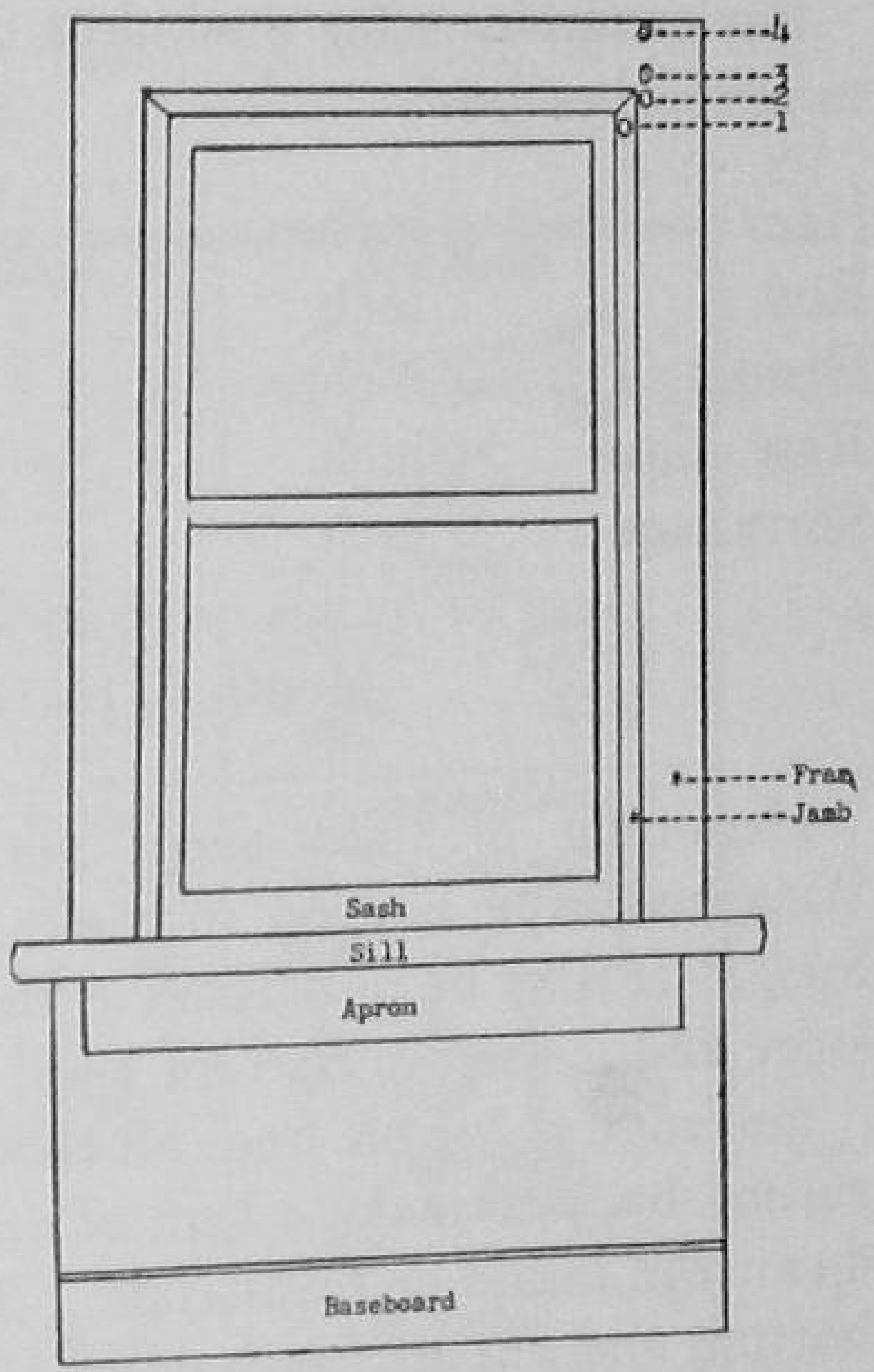
The following factors must be taken into consideration in designing built-in or ready-made cupboards or cabinets. When built to the floor, there should be no cracks for the entrance of dust and dirt. If raised from the floor, they should be high enough for easy cleaning. If built to the floor, some provision should be made for toe room when standing at the cupboard or table and sufficient room should be provided for comfort when sitting. Since a great deal of work can be carried on sitting as well as standing, a comfortable chair of proper working height for the tables and sink should be provided.

The refrigerator should be sufficiently well insulated so that a proper temperature for food storage may be secured within it. If it is an ice refrigerator, it should be adequately iced at all times. It should also have sufficient storage space to meet the needs of the size family it is to serve.

MEASURING FOR HANGINGS

Numbers 1, 2, 3, and 4 in the diagram on the next page indicate four possible positions for placing rod for glass curtains.

Be sure that the measuring instrument is accurate. If you use a yardstick, be sure it is standard length, or if you use a tape, that it has n't stretched.



Measure *each* window. The windows may appear the same, but they may vary from two to four inches.

For Glass Curtains

Measure across the sash from jamb edge to jamb edge for width, and from bottom of rod to the top of sill for length.

Add to the length the allowance for hems, casings, headings, turning in of raw edges, and shrinkage.

For a window that measures 72 inches:

Hem	2 inches	
Casing	2 inches	— for a 1 inch finished casing
Heading	2 inches	— for a 1 inch finished heading if required
Raw edges	1 inch	— ½ inch for each raw edge to be turned in
Shrinkage	1 inch	— shrinkage varies in different materials and may be more or less
	8 inches + 72 inches	= 80 inches in all for each length of material used

For the width allowance, consider the sheerness of the fabric you are using and the effect that you want. Voile, marquisette, and net usually require twice the window width. For example, a window measuring 36 inches requires two widths of 36-inch material.

For Draperies

Measure from the rod for the desired length — either to the bottom of the apron, or to the baseboard, or to within one inch of the floor. Add sufficient length to provide for top and bottom finish.

For example — for a window that measures 80 inches from rod to apron bottom:

Hem	3 inches
Rod	1 inch
Heading	4 inches
Raw edges	1 inch
Shrinkage	1 inch
	10 inches + 80 inches = 90 inches in all from each length of material used

Hemming of light sheet materials is best done by hand. Weighted tape is used to make curtains hang in more graceful folds. It may be purchased at the notion counter of a department store and is used in bottom hem.

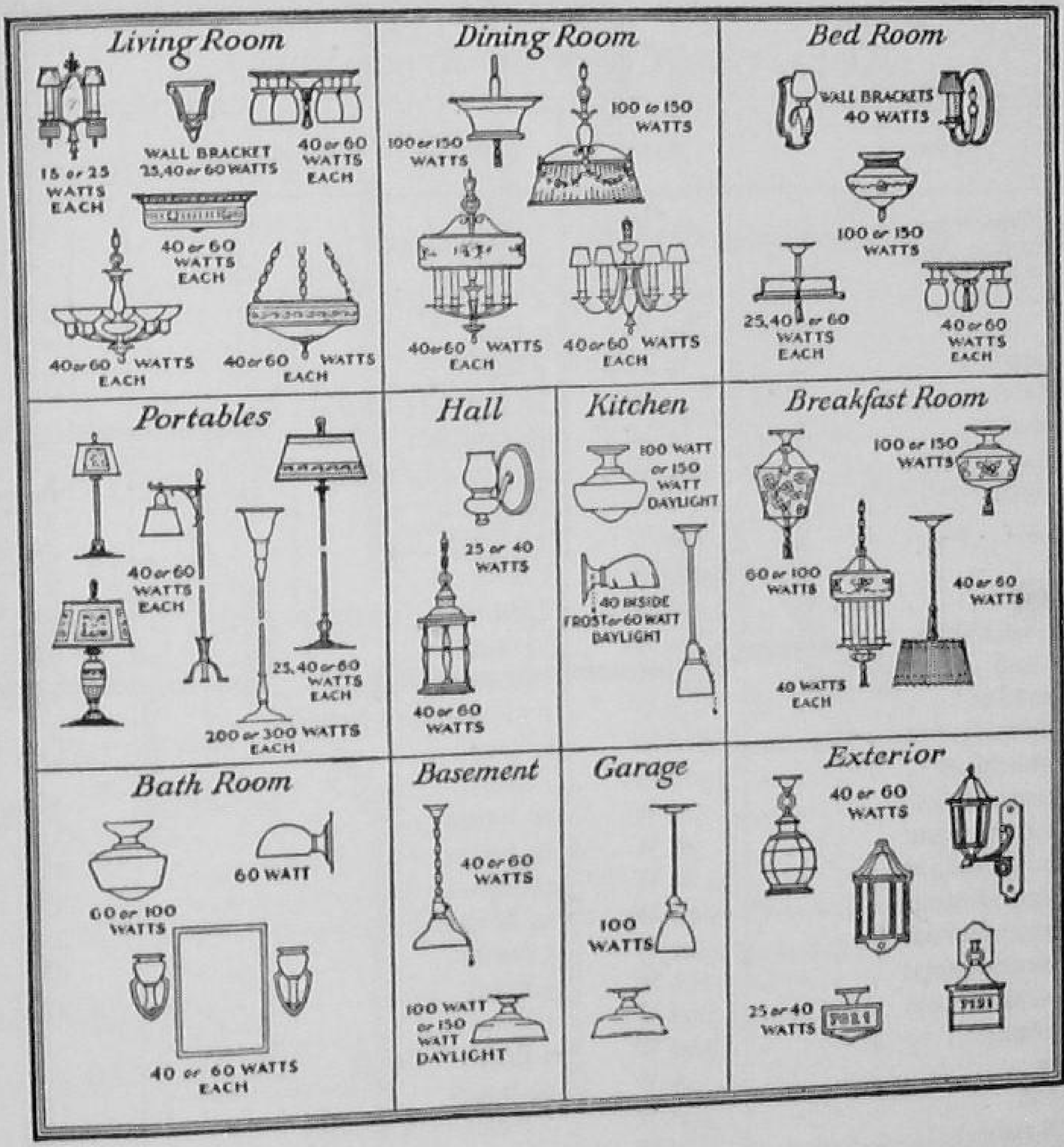
Selvedge is cut off from all sheer materials. The raw edges are turned back to make a hem of one to one and one-quarter inches down the inside or front edge. The hem is two inches across the bottom and one-half inch down the back edge. In small windows it is better to make both front and back edge hems the same width. A three-ply hem at bottom adds weight and firmness.

Headings may be nothing but a casing, allowing the diameter of the rod plus one quarter of diameter to permit material to slip and shirr on rod easily. The material is folded over twice and stitched at bottom or lower edge of fold.

LIGHTING

You should buy the lamps that light your home with the utmost care. Why? Because the quality and efficiency of the lamp determines how economically you secure good light. While all lamps may look about alike, some are so designed and constructed that they produce much more light for a given amount of current than do lamps of inferior and haphazard construction. Since lamp quality can be determined only by laboratory measurements and actual life tests, which are impossible for you to make, your only safeguard is the trade-mark of a manufacturer in whom you have confidence. Electricity is not only a wonderful servant but

one of the least expensive. Use it wisely by burning lamps that give you all the light you pay for.[1]



Units of Measurement[2]

Ampere. A unit used for measuring the rate of flow of electricity in a circuit. (Abbreviation: a. or amp.)

Kilowatt. One thousand watts. (Abbreviation: k.w.)

Kilowatt-Hour. This unit, ordinarily employed for measuring the use of electricity, is equivalent to 1000 watt-hours. (Abbreviation: k.w.h.)

Volt. A unit used for measuring the pressure which causes an electric current to flow. (Abbreviation: v.)

[1] Courtesy of General Electric Lighting Institute, Nela Park Engineering Department, Cleveland, Ohio

[2] Courtesy of The Electrical League of Cleveland, Ohio

Watt. A unit used for measuring electric power. The number of watts required to operate a lamp or appliance can be found by multiplying the volts by the amperes. (Abbreviation: w.)

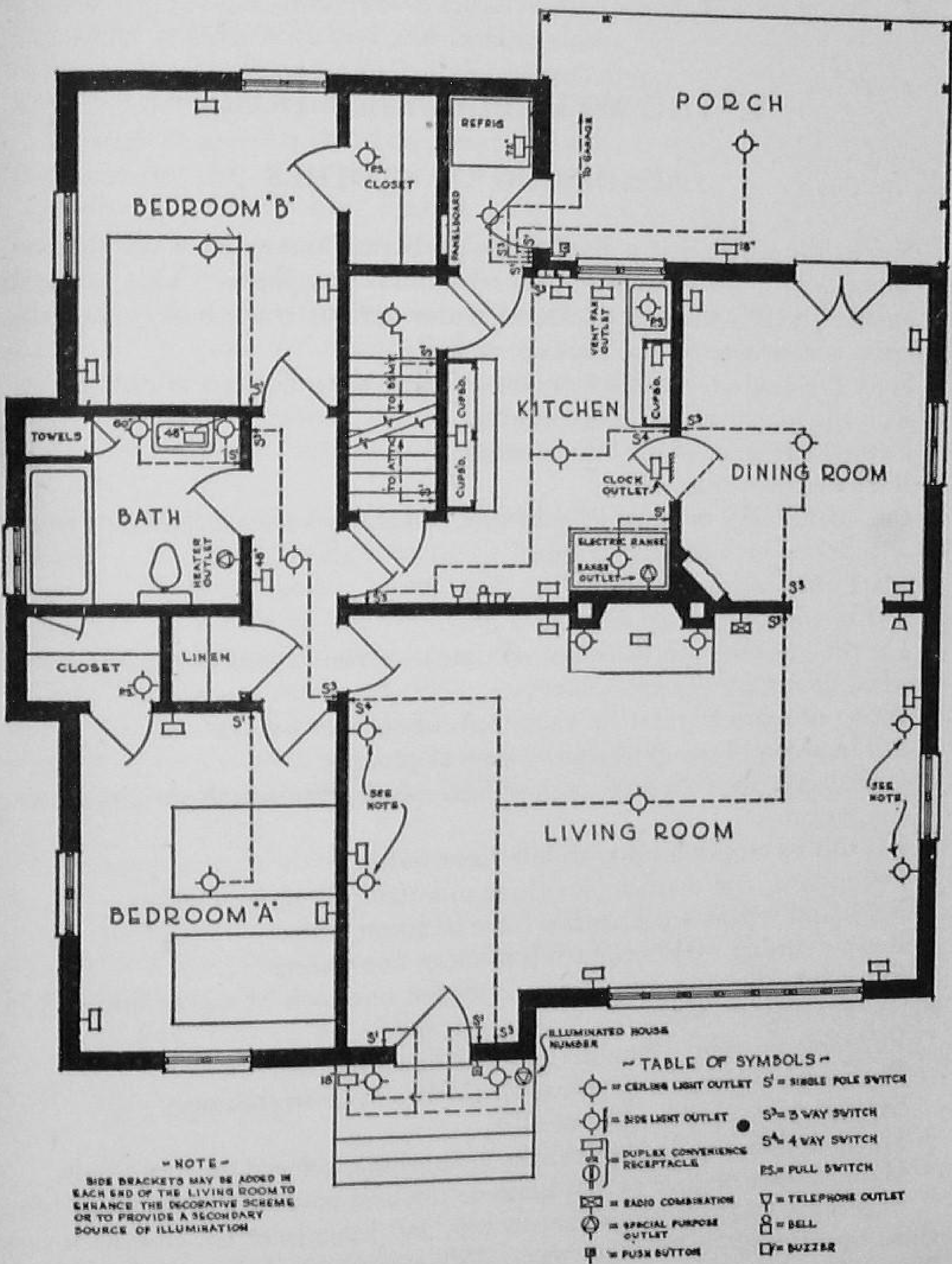
OPERATING COSTS OF APPLIANCES [1]

ITEM	WATTS	HOURS OR TIME OF USE	COST IN CENTS
Cleaner, floor type	300 W	1 hour	$1\frac{1}{5}$
Cleaner, hand type	150 W	1 hour	$\frac{3}{5}$
Clock	2 W	1 month (720 hours)	$5\frac{3}{4}$
Cooker	660 W	1 hour	$2\frac{2}{3}$
Clothes washer	$\frac{1}{4}$ H. P.	1 hour	$1\frac{1}{2}$
Curling iron	30 W	30 times (5 hours)	$\frac{3}{5}$
Dishwasher	$\frac{1}{4}$ H. P.	30 minutes	$\frac{3}{4}$
Egg cooker	500 W	12 times (1 hour)	2
Fan (12 inch)	50 W	10 hours	2
Food mixer	100 W	2 hours	$\frac{4}{5}$
Grill	500 W	1 hour	2
Hair dryer	430 W	2 times (1 hour)	$1\frac{3}{4}$
Heater, portable	660 W	$\frac{1}{2}$ hour	$1\frac{1}{3}$
Heating pad	60 W	10 hours	$2\frac{2}{5}$
House number	1 W	1 month (720 hours)	3
Iron (6 pound)	660 W	1 hour	$2\frac{2}{3}$
Ironing machine	1400 W	1 hour	$5\frac{3}{5}$
Lamp, incandescent	25 W	10 hours	1
Lamp, incandescent	40 W	10 hours	$1\frac{3}{5}$
Lamp, incandescent	60 W	10 hours	$2\frac{2}{5}$
Lamp, incandescent	75 W	10 hours	3
Lamp, incandescent	100 W	5 hours	2
Lamp, incandescent	150 W	3 hours	$1\frac{4}{5}$
Lamp, incandescent	200 W	1 hour	$\frac{4}{5}$
Milk warmer	500 W	6 times (1 hour)	2
Ozonator	18 W	10 hours	$\frac{3}{4}$
Percolator	400 W	7 times ($2\frac{1}{3}$ hours)	$3\frac{3}{4}$
Radio (8 tubes)	100 W	10 hours	4
Range (for family of four)		1 day	7
Refrigerator		1 day	3 to 7
Sandwich toaster	660 W	20 minutes	1
Sewing machine	110 W	5 hours	2
Soldering iron	200 W	1 hour	$\frac{4}{5}$
Sunlamp (S-2)	175 W	10 times (5 hours)	$3\frac{1}{2}$
Teakettle	400 W	10 times ($2\frac{1}{2}$ hours)	4
Toaster	600 W	10 times ($1\frac{2}{3}$ hours)	4
Ventilating fan	90 W	10 hours	$3\frac{3}{5}$
Vibrator (massage)	50 W	10 times (5 hours)	1
Waffle iron	660 W	30 minutes	$1\frac{1}{3}$

NOTE. — Costs are either actual or a trifle more. Figures are based on 4 cents a kilowatt-hour, with exception of that for range. Range installation usually brings a lower rate.

[1] Courtesy of The Electrical League of Cleveland, Ohio

Typical Wiring Layout for a Five-Room Bungalow[1]



The advent of portable lamps giving indirect lighting has made it possible to omit overhead light in living rooms. The outlet is made but sealed over. In wiring today the same procedure is followed with side lights over mantel. By installing wiring at the time of building it is possible to use the outlets at a later date if desired or if lighting needs develop the necessity for finishing the installation.

[1] Courtesy of The Electrical League of Cleveland, Ohio

V. THE WELL-MANAGED HOME

LAUNDERING OF CLOTHES

Soften the water if it is hard by using borax, ammonia, washing soda, or a material known chemically as tri-sodium-phosphate. This material is on the grocer's shelves, packaged under various trade names, but this name is somewhere on the package as well.

Soak the clothes in the lukewarm softened water for ten minutes.

Run the machine for three minutes.

Extract the soak water from clothes.

Remove them from tub.

Put soap flakes or soap jelly in tub, add water softener, add hot water to within one inch of "water line."

Start machine going.

Put in enough clothes to make a load.

Let the machine run the required time — seven to nine minutes for fine weaves, fifteen for coarser weaves.

Wring or extract water by using rolls or spinner basket.

Put in second load of clothes. Repeat process.

If clothes are not too dirty, a third load may be put into the original suds.

Empty tub.

Fill tub to proper level with hot rinse water.

Put in load, run machine for three minutes. Remove clothes.

Refill and repeat until clothes have had first rinse.

Repeat rinsing with second tub of clean hot water.

Fill tub with lukewarm water to within one inch of water line. Add bluing sparingly. Start machine in motion.

Put table linen in. Run machine for one minute.

Put in other pieces. Separate those that need stretching.

Stretch those clothes that need it.

Hang clothes, putting white ones in sunshine, colored ones in shade.

Hang clothes on line so that hems or thickest parts are fastened to line.

Sheets are folded bottom hem to top, and hung over the line with one third over; table linen same way. Pillow slips are hung at closed end. Towels lap one third over line. Shirts are folded with side seams together and pinned at gusset and shoulder seams, or hung by the tails. Dresses are hung by the hems. Handkerchiefs are hung four or five by one corner.

After complete drying, clothes are laid flat, sprinkled with warm water, and then tightly rolled. After an hour's standing they are ready for mangling or ironing.

Adjust the ironing board to the height which is comfortable for you, somewhere around thirty-two inches. Select a board with a wide surface, smoothly covered with pad and ironing cloth. A board which stands on three feet rather than on four does less wabbling and offers less danger of your feet getting tangled with those of the board.

If the floor is hard, stand on a mat of rubber or fiber. Some people are more comfortable when sitting on a high stool.

Select an iron with heat control. The modern iron which weighs three pounds and has an automatic heat control will do better work than a five-pound iron without heat control. The surface of the iron should be smooth. Every so often run it over a paraffined paper or a salt-sprinkled surface. If there are many clothes with buttons, select an iron with a button groove on the side. Be sure the handle is easy to grasp. The electric cord connection should have an unbreakable rubber plug. A spring or automatic reel to hold the cord out of your way as you do the ironing is a help.

Sheets which have been folded flat when taken from the line and rolled carefully after dampening may not need to have more than outer surface and the top hem ironed. Fold tablecloths right side out with selvage to selvage. Iron first on one side and then on the other. Continued pressing brings out the sheen of damask. Be sure that the cloth is perfectly dry before the ironing stops. Refold the ironed table cloth in halves lengthwise and then make crosswise folds which are not ironed in. Napkins, tablecloths or doilies with raised embroidery or monograms should be ironed on an extra padding of Turkish toweling covered with a piece of muslin or sheeting.

Rompers are ironed from the top down, pressing any heavy seams or bands on the wrong side first.

Dresses are ironed by pressing the sleeves first, then the collar, the waist, and last the skirt. You may have to re-iron or press the collar at the last.

In ironing boys' pants follow this order: first the pockets, seams and bands on the wrong side. Turn and iron on the right side until dry. NEVER iron corduroy trousers. Let them hang on the line until dry.

Cuffs of shirts are ironed first, pressing the wrong side and then the right. Next the sleeves are folded along the underarm seam and the ironing begins at the center and goes up toward the armscye and then down to the cuff. The collar is ironed next, then the yoke, the back and lastly the front. The folding of a shirt is simple. Button the collar and the first button. Fold the sleeves over on the back so they make a vertical line down the back. Fold the sides of the back over the sleeves. Fold the shirt up from the bottom half way. It is easier to hang shirts on coat hangers as soon as they are taken from the board. But if they have to be stored in drawers, folding is more satisfactory.

Machine or Mangle Ironing. Before purchasing an ironing machine experiment with several machines. Be sure that the one you purchase is strongly constructed and made by a reliable firm or sold in a reliable store. Methods of ironing are usually demonstrated. Repeat the process over and over under the direction of the demonstrator until you are sure you have learned all the fine points. Ask for the instruction booklet which has been compiled by the manufacturer of the ironer which you select. Keep the booklet at hand and study it thoroughly until you have mastered all the tricks and labor-saving motions which are recommended in the booklet.

Helpful Hints. Bluing streaks linens and loose-weave materials easily. Keep clothes in motion and have bluing weak.

Bluing settles on soap and water softeners that are not thoroughly rinsed from materials. If there is iron in the bluing, it leaves a rust-like spot.

Starch is made by mixing one-half cup dry starch with one-half cup cold water. Two quarts boiling water are added and the mixture is cooked over fire, stirring contents thoroughly for five minutes. The starch is then strained and diluted until of the consistency of thick cream.

Soap jellies are made by chipping bar soap or combining flakes or chips with enough cold water to cover. The mixture stands over night. Next day the contents are set over the fire, on the simmering burner, for a short time.

Correct temperatures for laundering white bedding, cottons, linens — 125° to 140° F.

Correct temperatures for laundering silks and wools — 90° to 98° F.

Correct temperatures for laundering colored clothes — 120° F.

Rinse water for first rinse — 120° F.

Rinse water for second rinse — 110° F.

Laundering Synthetic Fabrics Which Have Fibers That Weaken in Water

Prepare the garment for laundering by removing stains and any trimming which is unwashable. Remove your rings or bracelets which might catch on the materials.

Garments with a crêpe texture may shrink in laundering. Therefore, it is wise to measure them or to draw the outline of the

outstretched garment on a large sheet of paper before immersing the garment in the water.

Use mild soap, which has been shaved, powdered, or flaked. Swish in lukewarm water until the soap is dissolved and a rich suds is ready.

Be sure that the water is no warmer than lukewarm. Hot water makes colors run if there is any tendency for dyes to "bleed" or run.

As soon as the suds are ready, put the soiled garment in. Do not let it stand in the suds to soak but begin washing immediately. Do this by squeezing the material through the hands cupped, with fingers motile and active.

After all the material has been thoroughly impregnated with the suds, remove and prepare rinse water of the same lukewarm temperature. Rinse thoroughly, using the same cupping process. Repeat twice, being sure that the water is always of the same temperature and that the action of rinsing is quick. Don't let material stand in water. Remove the garment from the water and squeeze out as much water as possible. Do not twist or pull, as this is the time when the fiber is weakened.

If the garment is such that a large bath towel can be inserted, do that. Wrap the garment plus the bath towel in another bath towel. Roll it jelly-roll fashion. Squeeze or knead the towel from end to end. Remove the garment at once, and hang up, still with inserted bath towel in place. Never leave colored garments rolled. The two bath towels have absorbed almost enough of the moisture so that the garment is ready to iron or press soon after unrolling. Use a warm iron.

Knitted garments require no ironing but are stretched flat to fit the outline of the garment made on the large sheet before the garment was laundered. Knitted underwear needs no pressing.

Do not double the synthetic material and iron while folded. Only a final pressing may be given to doubled material.

Washing Woolen Garments

In washing sweaters or other woolen garments it is almost necessary that the outline of the original size be made before laundering Whereas synthetic materials are apt to come to grief when twisted, the woolen ones are likely to shrink in too hot water and to stretch

while being dried. Every precaution must be taken to avoid those two difficulties. Plenty of suds, lukewarm water, gentle cupping, patting of suds onto soiled places, more washing in second and third suds for really soiled garments, rinsing three times in three lukewarm rinse waters ought to give garments that are both clean and free from shrinkage. Pat and squeeze the water out, put a bath towel inside the garment, roll in another towel, and knead the length of the towel. Unroll and pin the sweater onto the original outline. Be sure to use pins that do not rust.

The knitted garments shrink in water and stretch in drying unless they are laid flat. Woven wool garments do not stretch but need to be dried in a shady place where there is a current of air.

Press the garments on the wrong side, using warm, not hot, iron.

Washing Leather Gloves

Do not let the gloves get too soiled. Mend any rips before laundering.

Be sure that the gloves are made of "washable" leather. Otherwise send them to the cleaner.

Remove your rings and bracelets while laundering. Make the same rich suds in lukewarm water as prepared for woolens and synthetic fabrics.

Dry the hands, slip the gloves on, and immerse in suds, washing as if you were washing your hands. If there is an especially dirty spot, rub a few dry soap flakes on that spot.

Chamois and doeskin gloves grow soft and easily tearable on the hands; therefore, wash in the suds but do not put them on the hands during the laundering process.

Remove the washed gloves from the hands — roll gloves down from the wrist. Do not pull them from the fingers.

Rinse in lukewarm water. Now make a very slight suds and rinse the gloves in this mild, soapy water.

Take the gloves by the fingers and let the water drain out. Roll in a bath towel, pressing the gloves flat, starting from finger tips and working toward wrist.

Roll in towel, knead the roll, unroll and blow into gloves to puff them slightly. Hang or dry the gloves indoors in a place which

is only moderately warm. Never use oven heat, or register, or radiator, as the heat is usually too excessive.

When the gloves are only slightly damp, place on wooden glove stretchers or press the fingers, the palm, and back of glove with your fingers until the leather is smooth and pliable.

Dyeing in the Washing Machine [1]

Any machine lined with material suitable for a dye pot can be used — enamel, glass, monel metal, aluminum. Galvanized iron and copper, unless chromium plated, are likely to dull or darken light colors.

Follow the directions that come with the dye, but instead of boiling for the length of time given, use very hot water — 160° to 180° F. — enough to float freely the material to be dyed; run your machine for ten minutes longer than the given boiling period, adding salt or vinegar or whatever the directions advise. The only things you do not do are boil and stir. You let the machine do the stirring.

Souse the clothes or material up and down in the first rinse water — which should be warm. Repeat the process in another rinse of cool water and keep on rinsing until no trace of dye is left in the water. Fabric may be wrung or put through the extractor between rinses, but do not put dyed material from its dye bath through a wringer.

Be sure you do not get too much material in the tub for the amount of dye bath. Weigh your fabrics and follow directions. For dark colors use about a third more dye to the pound, or water measure, than is recommended for the boiling method.

Cotton, linen, velvet, corduroy should be hung in the shade and moved occasionally while drying. Silks and woolens should be rolled carefully in a bath towel.

A Dye Bath to Produce Various Shades [2]

3 parts yellow, 1 part violet produces a gray-yellow
3 parts orange, 1 part blue produces a gray-orange

[1] Written by Della T. Lutes and Ethel A. Wright. Reprinted from Aug. 1933, *Ladies' Home Journal*

[2] Reprinted by courtesy of The White Sewing Machine Company from their course in "Costume Art." Copyright 1932 by The White Sewing Machine Company

3 parts red, 1 part green produces a gray-red
3 parts green, 1 part red produces a gray-green
3 parts blue, 1 part orange produces a gray-blue
3 parts violet, 1 part yellow produces a gray-violet
3 parts yellow, 1 part red produces a yellow-orange
3 parts red, 1 part yellow produces a red-orange
3 parts red, 1 part blue produces a red-violet
3 parts blue, 1 part red produces a blue-violet
3 parts blue, 1 part yellow produces a blue-green

VIII. THE WELL-BRED GIRL AND HER SOCIAL RELATIONSHIPS

NANCY PAGE PLANS SHOWERS[1]

Since showers are an accepted form of entertaining, the guest of honor would have to be "dumb" indeed if she did not know that sooner or later in the affair gifts would be brought out. Why, then, go to such elaborate preparations in an attempt to make the thing a surprise?

Nancy Page felt that fewer symbolic decorations on tables, less desire to think up some shower that never had been thought of before, would make parties more pleasing. She thought also that showers might become too expensive. Suppose that in a group of nine girls, one announced her engagement. Each of the other eight would plan to give her a shower. That means eight gifts apiece, plus cost of entertaining, plus a sizable wedding gift. The bride would become the recipient of 64 medium-priced gifts, when she might better get one really worth-while present — an end table, an occasional chair, a lamp, a luncheon set, or a dozen pieces of silver. Therefore, Nancy was in favor of the community shower with one gift from the group.

But Nancy could not bring every one to her way of thinking, and so she was often invited to showers or asked to suggest some new ones. She had at her tongue's end the obvious ones, such as kitchen, miscellaneous, handkerchief, stocking, canned fruits and jellies, linen, etc.

Here are other showers she suggested:

Bag Shower. Laundry bags, sachets, sewing bags, set of vegetable bags for ice box, traveling bags, dress protector bags, moth-proof bags. The hostess builds her idea around "letting the cat out of the bag."

[1] Reprinted by courtesy of "Nancy Page," Publishers Syndicate, Chicago, Illinois

Basket. Fireside basket, baskets for market and shopping, melon basket, garden tool basket, basket-weave textile or basket china. The hostess plans on letting guests follow the old admonition — "Never put all your eggs in one basket."

Bowl Shower. Mixing bowls, ice-box bowls, rose and flower bowls, bath soap bowl, salad and cracked ice bowls. The table is set to resemble a bowling green, and the guest of honor is "bowled over."

Correspondence. Stationery, address and note books, desk set, fountain pen and gold pencil, roll of stamps, etc. This shower is appropriate for the bride-to-be who will be living in another city after marriage.

Vanity Shower. Given by the bride's most intimate friends. It could include atomizer, bath salts, toilet water, powder puffs for guest room, magnifying mirrors, toilet set, tray, compact, week-end make-up box, make-up box with French print lid. At this shower a homily should be given on the general subject — "Vanity of vanities, all is vanity."

Glass. Mirrors, reading glass, curtain tie-backs, paper weights, shelves, racks, top for dressing table, tray.

Light Shower. Candles, candlesticks, flash lights, sconces, radium dial clock, sewing-machine lamp, radio lamp, lamps for every room. The hostess builds around the command — "Let there be light."

Nightgown and Lingerie Shower. This idea was cleverly worked out in a recent magazine article. The girls were asked to come to the hostess's home to have dinner and spend the night. Each guest's overnight bag was taken upstairs. After dinner all went up to unpack. The bags revealed nice nightgowns, negligees, pajamas, and mules. The guest of honor was quite surprised when she saw all the other guests putting on wraps, and overwhelmed when she realized the nightgowns, etc., were for her.

Stork Showers are usually luncheons or teas. The colors are baby blue or pale pink. Baby's breath, sweetheart roses, forget-me-nots are the usual flowers. Food may quite appropriately be animal crackers or animal-shaped sandwiches, cakes iced to represent alphabet blocks, cakes with names spelled on icing with uncooked macaroni letters. The stork, doctor's black bag, large

cabbage with concealed core are usual conveyances for gifts. A bassinet might be a community shower gift. A recent magazine gave a clever method of presenting gifts. The guests sent presents the day before, wrapped in pink. At luncheon the hostess announced she had a neighbor's baby left in her care, and later brought "her" down, all done up in pink blanket. Upon uncovering the carefully wrapped "baby" the gifts were discovered.

THE WEDDING[1]

What are the accepted hours for the wedding? Noon, three-thirty or four, eight o'clock.

When are the invitations sent out? Three weeks before the wedding.

Do they require an answer? Any invitation which requests the honor of your presence requires an answer.

How are the invitations addressed? "Mr. and Mrs. John Smith." No address on inner envelope. Invitation is never sent to "Mr. John Smith and family."

Who receives the invitations? Friends of the bride and groom and of their families.

When are announcements sent? On day of wedding.

Do they require an answer or acknowledgment? No.

What does the bride's family pay for? Decorations of church and home, music, refreshments, invitations, announcements, wedding dress, gifts for bridesmaids, possibly bridesmaids' flowers, conveyances for guests.

What does the groom pay for? License, clergyman's fee, bridal bouquet, gifts and boutonnières for ushers, gift for bride, traveling expenses.

What attendants are required at wedding? For informal type, none. Bride and groom and their families may make up wedding party. Matron or maid of honor, eight bridesmaids, eight ushers, best man, pages, flower girls, and ring bearer may be included in an elaborately staged ceremony.

What determines number of attendants? Type of wedding and place in which it is held. A simple home calls for a simple wedding.

[1] Reprinted by courtesy of "Nancy Page," Publishers Syndicate, Chicago, Illinois

What does the bride wear? Depends on type of wedding. A going-away dress or suit may be worn for a simple wedding. But with attendants at the ceremony, the traditional wedding dress and veil are worn.

What does groom wear? An inconspicuous business suit if the bride wears a going-away dress. But formal attire for bride calls for formal attire for man: well-fitted morning coat, striped dark gray trousers, dark waistcoat, wing collar, Ascot or four-in-hand tie, black shoes, gray suède gloves, flower. If an evening affair, formal evening clothes.

What is seating arrangement in church? Groom's family in front pew on right; bride's on left. Bride's family comes in just before the entrance of the bridal party. No one is shown to a seat after bride's family has been seated.

Does the bride show her wedding presents? She suits her own pleasure.

Who sits at bridal table? Bride on right of groom, best man on her right. Maid of honor on groom's left. Other attendants alternately.

Where do parents of bride and groom sit? At special table for them, for the clergyman, and for older distinguished guests. At a small wedding, the parents may sit at the bridal table opposite the bride and the groom.

What refreshments should be served? Anything from fruit punch and cakes to elaborate meal of bouillon, lobster Newburg, chicken, aspic, green salad, ices, cakes, coffee, etc.

Who cuts the bridal cake? Bride cuts the first piece. The cake is then taken to the kitchen and cut. It is brought back and passed to the guests. (The bridal cake is not the wedding cake, which is put in special small boxes for the guests to take home.) The bride's cake is white. The wedding cake is a dark fruit cake.

To whom do the bride and groom say "good-by" especially? To their parents.

Is it in good taste to shower departing pair with rice, confetti, etc.? No. It is vulgar to call public attention to private affairs. Well-bred people avoid that sort of thing.

Wedding Anniversaries

1st	Cotton	10th	Tin	30th	Pearl
2nd	Paper	12th	Silk, linen	35th	Lace
3rd	Leather	15th	Crystal	40th	Ruby
5th	Wooden	20th	China	50th	Golden
7th	Woolen	25th	Silver	75th	Diamond

INDEX

Recipes are listed in italics.

ACCESSORIES, gloves, 213; handkerchiefs, 215; hats, 216; jewelry, 215; shoes, 215; stockings, 214; umbrellas, 216
Accidents, minor, 428
Acid-forming elements, 32; -forming foods, 33; *vs.* alkali foods, 16
Advancement, money for, 350
Ailments, minor, 428
Air-conditioning, discussion of, 422
Alkaline-forming elements, 33; -forming foods, 33
Amino acids, 19
Angel food cake, 559
Angel food cake, discussion of, 139
Angels on horseback, 540
Apple crisp, 553; pie, 572; slump, 553; tapioca, 551
Apple sauce, pink, 510
Apples, baked, 509
Appliances, operating costs of, 642
Apricot, and cream cheese turnovers, 577; whip, 557
Aralac, 223
Architectural details and terms, 631
Architecture, 285–289; adaptations of, 287; discussion of, 285; types of, 286

BAKED, *apples, 509; custard, 550; pears, 510; pie shells, 574*
Baking powder, factors affecting action, 63; varieties of, 63
Baking-powder biscuits, characteristics of perfect, 64; mixing of, 64; varieties of, 65
Baking-powder biscuits, 514
Banana marlow, 581
Banbury tarts, 577
Basic Seven, chart, 601
Basting, essential points about, 607
Beef, quality of, 117; roasting of, 120; time tables for, 530–532
Berry, grunt, 553; pies, 572; roly poly, 554
Beverages, buttermilk, 68; chocolate, 68; cocoa, 68; coffee, 69; discussion of, 67; fruit-ades and punches, 70; milk, 67; *recipes for, 504–507;* sparkling, 70; tea, 69
Bibliography, well-being of the individual, 434–435; well-bred girl and her social relationships, 492–493; well-cared-for child, 414–415; well-dressed girl, 275–277; well-fed family, 191–194; well-managed home, 374–375; well-planned and furnished home, 335–338; well-spent dollar, 354–355
Biscuits, baking-powder, 514
Blanc mange, chocolate, 549
Blanc mange, discussion of, 100; ways of serving, 100
Blushing bunny, 542
Bortsch, Cracow, 522
Bound buttonholes, 619–620
Braising meats, 123; time table for, 530
Bread-and-butter letters, 471
Bread, amount needed daily, 44
Bread, yeast, 517
Bread pudding, varieties of, 102
Breads, 128–132; discussion of making, 129; kinds of, 128; score card for, 520; varieties of, 131; yeast in, 130
Breakfast toast, 507
Breakfasts, 51–77; American, 51; beverages, 67, cereals, 56; eggs, 58; European, 51; fruits, 55; need for, 53; quick breads, 61; variety in menus, 54
Broiling meats, modern methods of, 122; time table for, 532
Brown Betty, 552
Brownies, 567
Budgets, clothing, 233
Budgeting, advancement, 350; clothing, 349; discussion of, 343; emotions, 473–478; energy, 358–365; food, 348; homemaker's working week, 359; income and outgo, 343–353; operating expenses, 349; pattern for, 345; personality inventory, 477; savings, 347; shelter, 349

Buns, hot cross, 519
Butter, fondant, 583
Butter, storage of, in the home, 190
Buttermilk, as a beverage, 68
Buttonholes, 613–616; 619–620
Buttons, sewing on of, 616

CAKE, *angel-food, 559; chocolate ice-box, 563; dark fruit, 563; Dutch apple, 518; German coffee, 518; lady goldenglow, 561; marble, 561; plain layer, 559; pound, 562; rolled jelly, 562; spice, 561; sponge, 558; two-egg, 560; upside-down, 555*
Cakes, 136–139; baking, 138; butter, 137; butterless, 139; discussion of, 136; facts proved by experimentation, 137, 139; methods of mixing, 138; putting batter in pans, 138; score card for, 565; tests for doneness, 139; types, 137
Calorie, definition, 22; measurement, 22
Calories, table of 100-calorie portions of common foods, 593–598
Camembert cheese, jellied, 545
Candied orange peel, 584
Candles, 453
Candy, discussion of making, 166; *recipes for, 582–585;* temperatures, 585
Canned goods, can sizes of, 186; labeling of, 185; purchasing of, 185; storage of, 190
Canning, botulism in, 174; cautions applying to, 175; discussion of, 173; fish, 589; fruits, vegetables and meats, 173–175; meat, poultry, game, fish, 585; non-acid vegetables, 175; open-kettle method, 173; packing for, 588; preparation for poultry, 589; prepare meat for, 588; principle back of, 173; *recipes for, 585–591;* syrup table for fruits, 586; table for processing at high altitudes, 591; time table for processing meats, poultry, fish, game, 590; time table for processing soups and stews, 590; time table for standard fruits, 586; time table for standard vegetables, 587; water bath, 173
Carbohydrates, calories furnished by, 22; digestion of, 30; in foods, 15; starches, 29; sugar, 29; sugar consumption, 29; work of, 16
Carotene, 35
Carpets, 312
Cellophane, discussion of, 223
Cellulose, 42–43; need for in the body, 42; work of, 16
Centerpieces, 453
Cereals, 56–58; *cooking of, 511;* de luxe, 57; left-over, 58; nutritive value, 57; whole grain, amount needed daily, 44
Cheese, 92–95; discussion of, 93; uses for, 94; varieties of, 93
Cheese and fruit salad, frozen, 548; jellied Camembert, 545; macaroni and, 544; soufflé, 545
Cheese dishes, 543–545
Chess pies, individual, 573
Chicken, directions for roasting, 533; salad, 547
Chilaly, 543
Child care and development, 376–415
Children, care of clothing for, 624; clothes for small, 261; clothing and activities of, 390; food for, 400; management of, 376–415; manners and morals of, 379; parties for, 409; physical care of, 382; well-born child, 385
Chili con carne, 536
China, modern modes in, 327–330
Chocolate, as a beverage, 68; Mexican, 69
Chocolate, 505; blanc mange, 549; ice-box cake, 563; ice cream, 581
Chop suey, 537
Chyme, 19
Cider, mulled, 507
Cinnamon stars, 567
Clambakes, description of, 128
Cleaning, schedule for household routine activities, 363
Cleanliness of children, 382
Clothes, care and repair of, 266; dressy afternoon dress, 257; for the small child, 261; laboratory outfit, 231; laundering of, 644–649; relating accessories to, 213; relating color of, to you, 210; relating line of, to you, 207; remodeling of, 272; repair of children's, 624; school dress, 246; shopping for, 228–230; suitable fabrics for, 219–227; tailored dress, 252; underwear, 237
Clothing, 195–277; 605–630; budgeting of money for, 349; care and repair of, 266; needs and budgets, 233–235; procedure in construction of, 247
Clothing construction, 606–623; bound buttonholes, 619; buttonholes, 613; essential points about basting and marking in professional manner, 607; important stitches, 608; points on

various types of sleeves with effective finishes, 613; seams, 609; setting-in of a sleeve, 612; stitches combined to make embroidery designs, 617; twenty reasons for "home-made" looking garments, 606; zipper placket closings, 621
Clothing for the growing child, 390–400; birth to nine months, 390; five to six years, 398; four to five years, 396; nine months to one and one-half years, 391; one and one-half to three years, 393; three to four years, 395
Clothing repair, 624–628; children's clothes, 624; darning, 625; hemmed patch, 626; lengthening garments, 628; mending finely knitted material with net, 626; mending straight or slightly-jagged tear, 626; overhand patch, 627
Cocoa, 504
Cocoa, characteristics of good, 68
Coddled eggs, 511
Codfish balls, 541
Coffee, 504; boiled, 504; drip, 505; percolated, 505
Coffee, discussion of, 69; iced, 70
Coiffures, cunning, 628–630
Combination salad, 547
Comparative nutritional chart, 599–600
Compotes, poached fruit, 509
Consumer education, 181–188, 339–343; advertising, 182; chain store, 183; co-operatives, 184; farmer's market, 184; Foods and Drug Act, 182; labeling, 182; loss leaders, 183; profit, 183; purchasing canned goods, 185; purchasing dairy products, 185; purchasing dried fruits and vegetables, 187; purchasing fresh fruits, 186; purchasing fruits and vegetables, 185; purchasing meats, 185; purchasing staples, 184; supermarket, 183; telephone purchasing, 183
Contagious diseases, 416
Cooked salad dressing, 547
Cooked salad dressing, discussion of, 98; uses for, 98
Cookery, terms used in, 502
Cookies, 140–142; discussion of, 140; drop, 141; macaroons, 142; meringues, 142; overnight, 141; *recipes for, 567–571;* rolled, 141
Cookies, filled, 568; refrigerator, 570
Cord loops, sewing on of, 617
Cornflake macaroons, 568
Cornmeal mush, ways to serve leftover, 58
Cornmeal rolls, 515
Cover, individual, for breakfast, 452; for dinner, 454; for luncheon, 453
Cranberry, jelly, 510; sauce, 510
Cream cheese and apricot turnovers, 577
Cream puff shells, 578
Cream puffs, variations in uses of, 66
Cream soups, discussion of, 82; to avoid curdled, 82
Cream soups, table of, 521
Creamed dishes, 83–85; food combinations in, 84; foundation for, 83; methods of making cream sauce, 83; proportions for making cream sauce, 83
Croquettes, meat, 538
Crouton dressing, 535
Curtains, discussion of, 314; measuring for glass, 639
Custard, baked, 550; soft, 550
Custards, baked caramel, 101; discussion of, 100

Darning, 625
Desserts, 98–104; Bavarian creams, 145; blanc mange, 100; bread pudding, 102; desirable factors in frozen, 147; fruit gelatins, 104; ice cream, 146; methods of freezing, 147; milk and egg, 100; *recipes for, 549–558; recipes for frozen, 580–581; recipes for frozen, using mechanical refrigerator, 581;* rice pudding, 102; sauces for, 103; tapioca pudding, 102; using fruit, 103; using gelatin, 144; using milk as a base, 99; using milk, eggs and another binder, 101; varieties of, 99
Deep fat frying, 179; smoking temperatures of fats, 178
Deviled eggs, 513
Dieting, 24–26
Diets, 432; handy nutritional notes on, 600
Digestion, 17–21; of carbohydrates, 30; of proteins, 31
Dinners, 110–156; breads, 128; cakes, 136; cookies, 140; desserts using gelatin, 144; discussion of, 110; ice cream, 146; meal forms, 111; meat soups, 114; meats, poultry and fish, 115; menus, 112; pastry, 132
Dishwashing, 498–499
Draperies, measuring for, 639
Dress, dressy afternoon, discussion of,

257; school, discussion of, 246; tailored, discussion of, 252
Dressing, crouton, 535; standard, 534; variations for standard, 534
Dutch apple cake or kuchen, 518
Dyeing in the washing machine, 649

Eggless *tapioca pudding, 551*
Eggs, 58–61; characteristics of, 60; green color in hard-cooked, 60; tests for freshness of, 58
Eggs, deviled, 513; hard-cooked, 512; poached, 513; scrambled, 512; soft-cooked or coddled, 511; water-glass, 514
Embroidery stitches, simple, 618; combined to make designs, 617
End products, 19
Energy, content of foods, 21–24; measurement of, 22; requirements of average man, 604; requirements of average woman, 604
English monkey, 543
Entertainment in the home, 468–471
Environment of children, 385–389
Enzymes, 18–21; ptyalin, 18; work of, 18
Equipment, choice of kitchen, 636; placement of kitchen, 636
Ergosterol, 36
Etiquette, discussion of, 436–493

Fabrics, laundering synthetic, 646
Family relationships, 436–493
Fats, 15; calories furnished by, 22; characteristics of, 30; recent findings concerning, 178; smoking temperatures of, 178; variations in, 178; work of, 16
Filled cookies, 568
First-aid in the home, 428
Fish, canning of, 585; codfish, 127; discussion of, 126; characteristics of fresh, 127; methods of cooking, 127; *recipes for, 540–542;* time table for processing, 590
Flaky pie crust, 571
Floor coverings, carpets, 312; discussion of, 311; rugs, 313; varieties of, 311
Floor plans, 304, 306
Flour, in quick breads, 61; enriched, 132
Fondant, 582; butter, 583; nut patties, 583
Food, budgeting of money for, 348; definition of, 15
Food for the growing child, 400–409; for parties for children, 409–413
Food preparation, today *vs.* yesterday, 11–12
Food preservation, 169–175; canning fruits, vegetables and meats, 173; cautions applying to, 175; discussion of, 169; jelly making, 170; varieties of, 169
Foods, acid forming, 33; acid *vs.* alkali, 16; alkaline forming, 33; canning of, 173–175; containing nicotinic acid, 41; containing riboflavin, 40; containing thiamin, 40; containing vitamins, 35, 36, 38; introducing, 14; nutrients found in, 15; preservation of, 169–175; purchasing of, 184–188; storage of in the home, 188–190; table of 100-calorie portions of, 593–598
Foods and literature, 180
Foods and nutrition, 7–194; 497–604
Foods for special occasions, 157–168; candy, 166; holiday meals, 157
Formulae, nicotinic acid, 41; vitamin A, 35; vitamin B_1, 40; vitamin C, 38; vitamin D, 36; vitamin G or B_2, 40
Foundation cookie recipe, 569
Four-in-one jam, 592
French dressing, 546
French dressing, ingredients used in, 97; proportions of oil and acid in, 97; variations in, 97
French toast, 508
Friendship, characteristics of desirable friend, 438
Frosting, twice-cooked, 566
Frozen desserts, using mechanical refrigerator, 581–582; *recipes for, 580–581*
Frozen fruit and cheese salad, 548
Fruit, -ades, discussion of, 70; desserts, varieties of, 103; gelatins, 104; used in desserts, 103
Fruit, cake, dark, 563; compotes, poached, 509; ice cream, 582
Fruits, 55–56; amount needed daily, 44; purchasing of, 186; *recipes for, 508–510;* rich in pectin, 171; syrup table for, 586; storage of, 190; time table for canning, 586; ways of serving, 55
Fruits, glacé and nut meats, 584
Fruits, dried, 56; purchasing of, 187; storage of, 189
Fudge, logs, 584; marbles, 584; super, 583
Furnishing house of heart's desire, 310–335
Furniture, modern modes in, 317; selecting well-constructed, 320
Furniture charts, America, 634; characteristics of outstanding periods, 635; England, 632; France, 633

GADGETS, used in kitchen, 369
Game, canning of, 585; time table for processing, 590
Gelatin, Bavarian creams, 145; desserts using, 144; fruit, 104
German coffee cake, 518
Ginger ale, creamed, 506
Gingerbread, 558; men, 569; waffles, 517
Girl and the man, 478–481; her job, 482–484
Girl's room, inexpensive treatments for, 297; personality of, 295
Glacé fruits and nut meats, 584
Glass, discussion of fiber, 223; modern modes in, 327–330
Gloves, discussion of, 213; laundering of leather, 648
Grape and tomato salad, 549
Grape juice, easily made, 507; mulled, 507
Grapefruit and oranges, 509
Green peppers, stuffed, 539
Griddle cakes, 515
Grill, lamb chop, 538; mixed, 539
Grooming, discussion of, 200–207
Guest, rules for perfect, 447

HALLE play plan, 390–400
Halibut creole, 541
Ham, roasting of, 122
Handkerchiefs, discussion of, 215
Hangings, discussion of, 314; measuring for glass curtains, 639; measuring for draperies, 639; treatment of, 316; varieties of fabrics for, 314
Hard-cooked eggs, 512
Hats, discussion of, 216
Haystacks, 585
Hazelnut macaroons, 570
Health of the individual, 416–435; community attitude toward, 417; contribution of house to, 420; general discussion of, 416; habits for, 430; home medicine chest, 427; invalid's tray, 431; maintenance of, 425; minor accidents and ailments, 428; safety in the home, 433; score card, 430
Height-weight-age table, for boys, 603; for girls, 602
Heredity, 385–389
Holiday meals, 157–165; Christmas, 164; Decoration Day, 162; discussion of, 157; Easter, 161; Fourth of July, 162; Hallowe'en, 163; Labor Day, 163; May Day, 162; New Year's Day, 159; note on, 165; St. Patrick's Day, 160; Thanksgiving, 163; Valentine's Day, 160
Home management, 356–375; 644–650; budgeting of energy, 358; homemaker's working week, 359; kitchen as a workshop, 365; laundering, 371; schedule for routine activities, 363
Hooks and eyes, 616
Hostess, rules for perfect, 442
Hot breads, recipes for, 514–517
Hot cross buns, 519
Hot-water pie crust, 571
House, contribution of, to health, 420–425
House of your heart's desire, 302–335; furnishing of, 310; planning of, 303
House planning and furnishing, 278–338; 631–643; house of your heart's desire, 302; revealing interior, 290; telltale exterior, 278

ICE-BOX CAKE, *chocolate, 563*
Ice cream, 146–152; dasher-freezer method, 149; desirable factors in, 147; discussion of, 146; mechanical-refrigerator method, 150; methods of freezing, 147
Ice cream, chocolate, 581; fresh fruit, 580; fruit, 582
Icing, Portsmouth, 566; seven-minute, 566; twice-cooked, 566
Icings, recipes for, 566
Important stitches, 608–609
Insect pests, 190
Interior decoration, 290–301; color schemes, 293; discussion of, 290; living room, 292; your own room, 295
Introductions, 448–451
Invalid's tray, 431
Invitations, 471
Ironing, machine or mangle, 646
Italian delight, 537

JAM, *four-in-one, 592*
Jam and jelly, recipes for, 591–592
Jelly, cranberry, 510; Paradise, 592
Jelly making, definition of ideal jelly, 171; discussion of, 170; fruits rich in pectin, 171; paraffin seal, 172; pectin test, 171; sugar used in, 172
Jewelry, discussion of, 215

KITCHEN, as a workshop, 365; discussion of, 365; storage of utensils in, 368; working surfaces used in, 366
Kitchen planning, 635–638; choice of equipment, 636; placement of equipment, 636; storage spaces, 638;

working heights, 638; working spaces, 638
Koroseal, discussion of, 224
Kuchen, 518

Laboratory outfit, 231–233
Lady goldenglow cake, 561
Lamb, how to recognize quality, 118; roasting of, 120; time tables for, 530–532
Lamb chop grill, 538
Landscaping, 278–285
Lanital, discussion of, 223
Laundering, 644–649; basic pattern for, 371; dye bath to produce various shades, 649; dyeing in washing machine, 649; helpful hints, 646; leather gloves, 648; machine or mangle ironing, 646; synthetic fabrics, 646; woolen garments, 647
Layer cake, plain, 559
Leavenings, in quick breads, 63
Lemon, cake pie, 573; chiffon pie, 575; meringue pie, 574
Lettuce, preparation of, for salad, 96
Lettuce, wilted, 524
Lighting, 640–643; definitions of units of measurement, 641; discussion of, 640; kinds of fixtures, 641; modern modes in, 330–332; operating costs of appliances, 642; typical wiring layout for a five-room bungalow, 643
Lima bean loaf, 524
Linens, bathroom and kitchen, 323; bed linen and blankets, 323; modern modes in household, 322; monograms, 324; standard sizes for bedroom, 324; table, 323
Linoleum, 311
Loaf, Lima bean, 524; salmon, 542; spaghetti, 544
Lobsters, cooking of, 127; serving of, 127
Loganberry punch, 506
Luncheons, suppers, and box luncheons, 77–109; cheese, 92; creamed dishes, 83; desserts, 98; foods included in, 77; menus for luncheons, 78; milk, 90; salads, 95; sandwiches, 88; school lunches, 78; soups, 80; vegetables, 85

Macaroni, *and cheese, 544; salad, 548*
Macaroons, discussion of, 142
Macaroons, cornflake, 568; hazelnut, 570
Management of children, discussion of, 376; manners and morals, 379
Manners, and social life, 466–467; at the table, 461–466; in business, 482–484; of children, 379–381
Marble cake, 561
Marketing and food storage, 181–191; economics of purchasing, 181; storage in the home, 188
Marlow, banana, 581
Materials, cellulose products, 334; metals, 335; modern modes in, 333–335; plastics, 334
Mattresses, modern modes in, 325
Mayonnaise, 546
Mayonnaise, discussion of, 97; uses for, 98
Meal planning, discussion of, 47; menus, 48–50
Meals, holiday, 157–165; yesterday *vs.* today, 26–29
Measurements, 12–13; exact, 502; units of, in lighting, 641
Meat, canning of, 585; time table for processing, 590
Meat croquettes, 538
Meats, 115–128; braising of, 123; broiling of, 122; definition of terms used in cooking, 525; discussion of, 115; federal inspection of, 118; grading and stamping of, 118; how to recognize quality in beef, 117; how to recognize quality in lamb and mutton, 118; how to recognize quality in pork, 118; how to recognize quality in veal, 117; modern methods of cooking, 119; modern methods of roasting ham, 122; nutritive value of, 115; quick-frozen, 124; roasting of, 120; time tables for cooking, 530–532
Medicine chest, home, 427
Melba toast, 507
Mending, 626
Menu planning, 7–11
Menus, 49–50; dinner, 111–112; for holiday meals, 159–165; for luncheon, 78; Sunday supper, 7–8; standards for, 8; yesterday *vs.* today, 26
Meringues, 564
Meringues, discussion of, 142
Milk, 90–92; amount required daily, 43, 92; as base for desserts, 99; need for in the diet, 91; nutritive value of, 67; storage of in the home, 189; ways of using, 92
Milk and egg desserts, 100
Mineral salts, 15, 32–33; needed in the body, 32; work of, 16
Mirrors, modern modes in, 332–333
Mixed grill, 539

Monograms, 324
Mousse, peanut brittle, 582; strawberry, 581
Muffins, 515
Muffins, characteristics of perfect, 64; mixing of, 64; variations in, 66
Mulled cider or grape juice, 507
Mutton, how to recognize quality in, 118

NEAPOLITAN *sauce, 544*
Needle and thread sizes, chart of, 605
Niacin or Pellagra-preventive, 41; amount needed, 41; amount stored in body, 41; cautions in cooking foods containing, 41; foods containing, 41; formula for, 41; use of, 41
Nutrients, today's knowledge of, 29–43; carbohydrates, 29; cellulose, 42; fats, 30; found in foods, 15; mineral salts, 32; proteins, 31; vitamins, 33; water, 42
Nutrition and foods, 7–194; 497–604
Nutrition check up, 43
Nutritional charts, comparative, 599–600
Nylon, discussion of, 223

OMELET, *puffy, 512*
Onion soup, 522
Operating expenses, budgeting money for, 349
Orange, nog, 506; peel, candied, 584; toast, 508
Oranges and grapefruit, 509
Oyster stew, 542
Oysters, ways of serving, 128

PARADISE *jelly, 592*
Parker House rolls, 519
Parties, favors from the kitchen for, 410; for children, 409–413
Pastry, 132–135; popularity of 133; qualifications for perfect, 133; *recipes for, 571–580*
Patching, hemmed, 626; overhand, 627
Peach chiffon pie, 576
Peanut brittle mousse, 582
Pears, baked, 510
Pectin, fruits rich in, 171; test for, 171
Personal regimen, 436–493, 651–655; budgeting emotions, 473; characteristics of a desirable friend, 438; coiffures, 628–630; discussion of, 436; getting along with the family, 485; girl and her job, 482; girl and the man, 478; introductions, 448; manners and social life, 466; perfect guest, 447; perfect hostess, 442; recreation and entertainment in the home, 468; table manners, 461; table setting and service, 451
Personality inventory, 477–478
Pests, 190
Pictures, modern modes in, 332–333
Pie, apple, 572; berry, 572; individual chess, 573; lemon cake, 573; lemon chiffon, 575; lemon meringue, 574; peach chiffon, 576; pumpkin, 576; shells, baked, 574
Pie crust, flaky, 571; hot-water, 571
Pies, baking shell, 135; cold-water crust, 134; discussion of, 133; hot-water crust, 134; perfect, 133; score card for, 579; shaping of crust, 135; shortenings used in crust, 133
Pillows, modern modes in, 326
Plastics, modern modes in, 334
Pliofilm, discussion of, 224
Poached eggs, 513
Popovers, 516
Popovers, baking of, 65
Pork, how to recognize quality, 118; roasting of, 120; roasting of ham, 122; time table for, 530–532
Pork chops, Arabian, 536; supreme, 536
Portsmouth, icing, 566
Potato and rye bread soup, 523
Potatoes baked on half shell, 525
Poultry, canning of, 585; cleaning, 529; dressing, 534; preparation of, preliminary to roasting, 528; *recipe for roasting chicken, 533;* roasting, 528; time table for processing, 590; time table for roasting, 533; trussing, 529
Poultry, game, and winged birds, 125–126; discussion of, 125; varieties of cooking methods for, 126
Pound cake, 562
Proteins, calories furnished by, 22; characteristics of, 31; complete, 31; daily calories from, 23; digestion of, 31; end products of, 31; foods rich in, 32; groups of, 15; incomplete, 31; recent findings concerning, 179; work of, 16
Prunes, cooking of, 56
Ptyalin, 18
Pudding, bread, 102; rice, 102; tapioca, 102
Pudding, creamy rice, 550; eggless tapioca, 551; steamed, 555; Viennoise 557
Pumpkin pie, 576
Punch, fruit, discussion of, 71

Punch, loganberry, 506
Purchasing, canned goods, 185; dairy products, 185; dried fruits and vegetables, 187; fresh fruits, 186; fruits and vegetables, 185; meats, 185; staples, 184

Quick breads, 61–67; baking powder biscuit, 64; flour used in, 61; leavening used in, 62; liquid used in, 62; muffins, 64; popovers, 65; variations in baking powder, 63; variations in biscuits, 65; variations in cream puffs, 66; variations in muffins, 66; variations in waffle accompaniments, 66; waffles, 65
Quick-frozen meats, 124

Rarebit, *Welsh, 543*
Raspberry shrub, 506
Rayon, discussion of, 220
Recipes, 504–592; beverages, 504; cake, 558; candy, 582; canning, 585; cereals, 511; cheese dishes, 542; cookies, 567; desserts, 549; eggs, 511; fish and sea food, 540; frozen desserts, 580; fruits, 508; hot breads, 514; icings, 566; meats, 525; pastry, 571; salad dressings, 546; salads, 547; soups, 521; toast, 507; vegetables, 523; yeast breads, 517
Recreation and entertainment in the home, 468–471
Refrigerator, cookies, 570; rolls, 520
Relationships with other people, 473–478; getting along with the family, 485; girl and the man, 478; personality inventory, 477
Rest, for children, 383
Riboflavin, 40–41; amount needed, 41; amount stored in body, 41; cautions in cooking foods containing, 40; foods containing, 40; formula for, 40; use of, 41
Rice pudding, creamy, 550
Rice pudding, discussion of, 102; variations in, 102
Roasting, ham, 122; meats, modern method, 119; time table for, 531
Roasting, chicken, 532; poultry, 528–530
Rolled jelly cake, 562
Rolls, cornmeal, 515; Parker House, 519; refrigerator, 520
Rugs, 312
Rye bread and potato soup, 523

Safety in the home, 433
Sailor's duff, 556
Salad, chicken, 547; combination, 547; frozen fruit and cheese, 548; macaroni, 548; shrimp, 548; stuffed pepper, 549; tomato and grape, 549
Salad dressings, cooked, 98; French, 97; mayonnaise, 97
Salad dressings, cooked, 547; French, 546; mayonnaise, 546; Thousand Island, 546
Salads, 95–98; characteristics of good, 95; cooked dressing, 98; definition of, 95; French dressing, 97; mayonnaise dressing, 97; method of preparing lettuce for, 96; preparation of other salad greens, 97; *recipes for, 547–549*
Salmon loaf, 542
Sandwiches, 88–90; buffet arrangement for making, 90; rules for making, 89; variety in fillings for, 88; variety in sizes of, 89
Sauce, fruit juice marshmallow, 553; lemon snowbank, 556; marshmallow, 552; nutmeg, 554; sabayon, 557; yellow foamy, 556
Sauces for desserts, fruit, 103; variations in serving, 104
Savings, a budget program for, 347
Schaum torte, 564
School lunches, 78–79; equipment for packing, 79; foods for lunch box, 79
Score card, for cake, 565; for pie, 579; for yeast breads, 520
Scrambled eggs, 512
Sea food, clambakes, 128; discussion of, 127; lobsters, 127; oysters, 128; *recipes for, 540–542*
Seams, 609–611
Seven-minute icing, 566
Shells, baked pie, 574; cream puff, 578; tart, 575
Shelter, budgeting of money for, 349
Sherbet with citrus fruits, 580
Shoes, discussion of, 215
Shortening, in quick breads, 62
Showers, 651–652; discussion of, 651; varieties of, 652
Shrimp salad, 548
Shrub, raspberry, 506
Silver, modern modes in, 327–330; placement of, on table, 454
Sleeves, setting in of, 612; varieties of types with effective finishings, 613
Snap fasteners, sewing on of, 616
Soft-cooked eggs, 511
Soft custard, 550

Soufflé, cheese, 545
Soup, onion, 522; potato and rye bread, 523
Soups, 80–83; accompaniments and accessories for, 82; classification of, 81; cream, 82; discussion of, 80; discussion of meat, 114; flavorings for meat, 114; meat, 114–115; removing fat from meat, 114
Soups, table of cream, 521; variety in, 522
Spaghetti loaf, 544
Sparkling beverages, 70
Sparkling beverages, creamed ginger ale, 506; loganberry punch, 506
Spice cake, 561
Spinach, spring luncheon dish, 524; supreme, 525
Sponge cake, 558
Spring luncheon dish, 524
Starches, digestion of, 30; foods rich in, 29; recent findings concerning, 178
Steamed pudding, 555
Stew, oyster, 542
Stitches combined to make embroidery designs, 617–619
Stockings, discussion of, 214
Storage of foods in the home, 188–190
Storage spaces in kitchen, 638
Strawberry mousse, 581
Stuffed pepper salad, 549
Sugar, as a food nutrient, 29; consumption of in United States, 29; recent findings concerning, 177
Sunday supper menus, 7–8
Super fudge, 583
Suppers, luncheons, and box luncheons, 77–109

TABLE MANNERS, 461–466
Table setting and service, discussion of, 451; individual cover for breakfast, 452; individual cover for dinner, 454; individual cover for luncheon, 453; types of service, 456
Tapes, sewing on of, 617
Tapioca, apple, 551; cream, 551; eggless pudding, 551
Tapioca pudding, discussion of, 102; varieties of, 103
Tart shells, 575
Tarts, Banbury, 577
Tea, 504
Tea, iced, 70; tisanes, 69; ways of serving, 69
Temperatures, candy, 585
Terms used in meat cookery, 525–528
Textiles, suitable for clothes, 219–227
Thiamin, 40; amount needed, 40; amount stored in body, 40; cautions in cooking foods containing, 40; foods containing, 40; formula for, 40; use of, 40
Thousand Island dressing, 546
Thread and needle sizes, chart of, 605
Timbales, 578
Time table, canning standard fruits, 586; canning standard vegetables, 587; processing meats, poultry, fish, game, 590; processing soups and stews, 590
Toast, breakfast, 507; French, 508; melba, 507; orange, 508
Tomato and grape salad, 549
Toys for the growing child, 390–400
Turkey, directions for roasting, 534; time table for roasting, 533
Turnovers, 577; apricot and cream cheese, 577
Twice-cooked frosting, 566

UMBRELLAS, discussion of, 216
Underwear, discussion of, 237–241
Upside-down cake, 555
Utensils, care of, 499–502; aluminum, 500; chrome, 500; copper, 500; discussion of, 499

VEAL, how to recognize quality, 117; roasting of, 120; time tables for, 530–532
Veal birds, 540
Vegetables, amount needed daily, 44; canning time table for, 587; discussion of, 85; dried, purchasing of, 187; leafy, storage of, 189; methods of cooking, 86; *recipes for, 523–525;* root stock, storage of, 189; uncooked, 87
Vegetables, variety in cooking of, 523
Viennoise pudding, 557
Vitamin A, 35–36; amounts needed, 36; amounts stored in body, 36; carotene, 35; cautions in cooking foods containing, 35; foods containing, 35; formula for, 35; precursor, 35; use of, 36
Vitamin B complex, 39–42; formulae for, 40, 41; groups included in, 39; niacin or pellagra-preventive, 41; riboflavin or G or B_2, 40; thiamin or B_1, 40
Vitamin C, amounts needed, 39; amounts stored in body, 39; cautions in cooking foods containing, 38;

foods containing, 38; formula for, 38; use of, 39
Vitamin D, amounts needed, 37; amounts stored in body, 37; cautions in cooking foods containing, 37; foods containing, 36; formula for, 36; precursor, 36; use of, 37
Vitamins, 33–42; A, 35; B complex, 39; C, 38; D, 36; discussion of, 33; niacin, 41; recent findings concerning, 180; riboflavin, 40; summary, 42; thiamin, 40; work of, 16

WAFFLES, *516; gingerbread, 517*
Waffles, characteristics of good, 65; variations in accompaniments, 66
Water, 15, 42; amount required daily, 42; uses of in the body, 42; work of, 16
Water-glass eggs, 514
Weaves, varieties of, 226–227
Weddings, anniversaries of, 655; discussion of, 653
Weight-height-age table for boys of school age, 603; for girls of school age, 602
Well-dressed girl, 195–277; ABCDE of dress, 196; discussion of, 195; grooming and posture, 200; laboratory practice, 605–630
Well-managed home, 356–371; budgeting of energy, 358; discussion of, 356; laboratory practice, 640; kitchen as a workshop, 365; laundering, 371
Well-spent dollar, 339–355; budgeting of income and outgo, 343; discussion of consumer problems, 339
Welsh rarebit, 543
Whip, apricot, 557; prune, 557
White sauce, methods of making, 83; proportions for making, 83; uses for, 84
Wilted lettuce, 524
Woolen garments, laundering of, 647

YEAST *bread, 517*
Yeast breads, *recipes for, 517–521;* score card for, 520
Yeasts, cultivated, 130; wild, 129

ZIPPER placket closings, 621–623